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ICONES PLANTARUM;

OR

FIGURES,

WITH

BRIEF DESCRIPTIVE CHARACTERS AND REMARKS,

OF

NEW OR RARE PLANTS,

SELECTED FROM THE AUTHOR'S HERBARIUM.

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INDEX

TO THE

PLANTS CONTAINED IN VOLUME II.;

ARRANGED ACCORDING TO THE NATURAL ORDERS.

	TAB.		TAB.
RANUNCULACEÆ.		MELIACEÆ.	
<i>Wrightia Wightiana, Wall.</i>	176	<i>Guarea? microphylla, Hook.</i>	129
<i>Andryas Andicola, Hook.</i>	137	EUPHORBIACEÆ.	
<i>Peperomia sagittifolia, Hook.</i>	173	<i>Euphorbia aphylla, Brouss.</i>	182
DILLENACEÆ.		LEGUMINOSÆ.	
<i>Peperomia uniflorum, Hook.</i>	157	<i>Indigofera aspalathoides, Vahl,</i>	188
CUCURBITACEÆ.		<i>Clitoria viridiflora, Bout.</i>	152
<i>Cucurbita Indica, W. & A.</i>	138	<i>Shuteria glabrata, W. & A.</i>	144
CAPPARIDACEÆ.		<i>Rhynchosia rufescens, DC.</i>	189
<i>Capparis Roxburghii, Br.</i>	178	<i>Bauhinia racemosa, Lam.</i>	141
<i>Capparis linearis, W. & A.</i>	124	<i>Mimosa rubicaulis, Lam.</i>	156
<i>Capparis oblongifolia, W. & A.</i>	127	<i>Acacia setiformis, All. Cunn.</i>	159
<i>Capparis incanescens, DC.</i>	123	<i>translucens, All. Cunn.</i>	160
<i>Capparis brevispina, W. & A.</i>	126	<i>hispidula, All. Cunn.</i>	161
<i>Capparis pedunculosa, Wall.</i>	128	<i>buxifolia, All. Cunn.</i>	164
<i>Capparis diversifolia, W. & A.</i>	181	<i>Cunninghamii, Hook.</i>	165
<i>Capparis suberosa, DC.</i>	120	<i>setigera, All. Cunn.</i>	166
SAPINDACEÆ.		<i>anceps, Hook.</i>	167
<i>Sapindus nitida, Pers.</i>	132	<i>neurocarpa, All. Cunn.</i>	168
BYTTNERIACEÆ.		<i>dolabriformis, All. Cunn.</i>	169
<i>Byttneria reticulatum, Wight,</i>	125	<i>cultriformis, All. Cunn.</i>	170
STERCULIACEÆ.		<i>Fraseri, Hook.</i>	171
<i>Sterculia colorata, Roxb.</i>	143	<i>lycopodiifolia, All. Cunn.</i>	172
ELÆOCARPEÆ.		AMARANTHACEÆ.	
<i>Elæocarpon coriaceus, Hook.</i>	154	<i>Iresine grandiflora, Hook.</i>	102
<i>Elæocarpon pubescens, Hook.</i>	155	PHYTOLACCEÆ.	
LYTHRARIACEÆ.		<i>Rivina inæqualis, Hook.</i>	130
<i>Lythrum parvifolia, Hook.</i>	116		

	TAB.		TAB.
WEINMANNIÆ.		APOCYNÆ.	
<i>Escallonia polifolia</i> , <i>Hook.</i>	114	<i>Vallaris Pergularia</i> , <i>Br.</i>	153
ERICAÆ.		ORCHIDÆ.	
<i>Andromeda phyllireifolia</i> , <i>Hook.</i>	122	<i>Catasetum cristatum</i> ; var. <i>monstrum</i> , <i>Hook.</i>	177
VACCINIÆ.		<i>Cymbidium plicatum</i> , <i>Harv.</i>	104
<i>Vaccinium Emirnense</i> , <i>Hook.</i>	131	<i>Pachyphyllum parvifolium</i> , <i>Lindl.</i>	117
<i>secundiflorum</i> , <i>Hook.</i>	134	<i>Holothrix Harveiana</i> , <i>Lindl.</i>	103, A
<i>Thibaudia elliptica</i> , <i>R. & P.</i>	108	<i>parvifolia</i> , <i>Lindl.</i>	103, B
<i>angustifolia</i> , <i>Hook.</i>	110	AROIDÆ.	
<i>acuminata</i> , <i>Hook.</i>	111	<i>Pothos scandens</i> , <i>L.</i>	175
<i>Sphyrospermum myrtifolium</i> , <i>Hook.</i>	112	<i>remotiflorus</i> , <i>Hook.</i>	133
<i>Macleania floribunda</i> , <i>Hook.</i>	109	GRAMINÆ.	
PRIMULACÆ.		<i>Aira antarctica</i> , <i>Hook.</i>	150
<i>Douglasia nivalis</i> , <i>Lindl.</i>	180	FILICES.	
ILICINÆ.		<i>Anemia Gardneri</i> , <i>Hook.</i>	190
<i>Ilex microphylla</i> , <i>Hook.</i>	139	<i>Acrostichum squamipes</i> , <i>Hook.</i>	192
<i>crassifolia</i> , <i>Hook.</i>	149	<i>Gymnogramma vestita</i> , <i>Wall.</i>	115
MYRSINÆ.		<i>Polypodium bauriculatum</i> , <i>Hook.</i>	121
<i>Clavija spathulata</i> , <i>R. & P.</i>	140	<i>Lomaria Fraseri</i> , <i>All. Cunn.</i>	185
POLEMONIACÆ.		<i>Diplazium cordifolium</i> , <i>Blume</i> ,	184
<i>Hugelia virgata</i> , <i>Benth.</i>	200	<i>Antigramma repanda</i> , <i>Presl</i> ,	183
<i>Fenzlia dianthiflora</i> , <i>Benth.</i>	199	<i>Pteris flexuosa</i> , <i>Hook.</i>	119
RUBIACÆ.		<i>Lindsæa macrophylla</i> , <i>Kaulf.</i>	193
<i>Neurocalyx Zeylanicus</i> , <i>Hook.</i>	174	<i>Asplenium Dalhousiæ</i> , <i>Hook.</i>	105
COMPOSITÆ.		<i>Adiantum dolabriforme</i> , <i>Hook.</i>	191
<i>Palafoxia Texana</i> , <i>Hook.</i>	148	<i>Trichomanes montanum</i> , <i>Hook.</i>	187
<i>Brachyris ramosissima</i> , <i>Hook.</i>	142	LYCOPODIACÆ.	
<i>microcephala</i> , <i>DC.</i>	147	<i>Lycopodium lepidophyllum</i> , <i>Hook.</i>	
<i>Gymnopsis uniserialis</i> , <i>Hook.</i>	145	<i>et Gr.</i>	162, 163
<i>Oligogyne Burchellii</i> , <i>Hook.</i>	101	<i>Jussieui</i> , <i>Desv.</i>	186
<i>Hymenoxis ? linearifolia</i> , <i>Hook.</i>	146	MUSCI.	
ACANTHACÆ.		<i>Gymnostomum setifolium</i> , <i>H. & A.</i>	135
<i>Aphelandra acanthifolia</i> , <i>Hook.</i>	113	<i>Polytrichum semilamellatum</i> , <i>Hook.</i>	
SCROPHULARINÆ.		<i>fil.</i>	194, A
<i>Lindernia Capensis</i> , <i>Th.</i>	151	<i>Weissia campylocarpa</i> , <i>H. & A.</i>	136
<i>Harveya Capensis</i> , <i>Hook.</i>	118	<i>Grimmia laxifolia</i> , <i>Hook. fil.</i>	194, B
SOLANÆ.		<i>Glyphocarpa Roylii</i> , <i>Hook. fil.</i>	194, C
<i>Atropa glandulosa</i> , <i>Hook.</i>	106	<i>Dicranum Jamesoni</i> , <i>Hook.</i>	179
<i>dependens</i> , <i>Math.</i>	107	HEPATICÆ.	
GENTIANÆ.		<i>Marchantia trichocephala</i> , <i>Hook.</i>	158
<i>Lisianthus frigidus</i> , <i>Sw.</i>	195	LICHENES.	
<i>daturoides</i> , <i>Griseb.</i>	196	<i>Cladonia perfilata</i> , <i>Hook.</i>	192

INDEX

TO THE

PLANTS CONTAINED IN VOLUME II.;

ALPHABETICALLY ARRANGED.

	TAB.		TAB.
<i>Anceps</i> , <i>Hook.</i>	167	<i>Brachyris ramosissima</i> , <i>Hook.</i>	142
<i>Buxifolia</i> , <i>All. Cunn.</i>	164	<i>Capparis brevispina</i> , <i>W. & A.</i>	126
<i>Cultriformis</i> , <i>All. Cunn.</i>	170	<i>diversifolia</i> , <i>W. & A.</i>	181
<i>Cunninghamii</i> , <i>Hook.</i>	165	<i>incanescens</i> , <i>D C.</i>	123
<i>Dolabrifolia</i> , <i>All. Cunn.</i>	169	<i>pedunculosa</i> , <i>Wall.</i>	128
<i>Fraseri</i> , <i>Hook.</i>	171	<i>Catasetum cristatum</i> ; <i>var. monstro-</i>	
<i>Hispidula</i> , <i>All. Cunn.</i>	161	<i>sum</i> , <i>Hook.</i>	177
<i>Lycopodiifolia</i> , <i>All. Cunn.</i>	172	<i>Cladonia perfoliata</i> , <i>Hook.</i>	192
<i>Neurocarpa</i> , <i>All. Cunn.</i>	168	<i>Clavija spathulata</i> , <i>R. & P.</i>	140
<i>Setiformis</i> , <i>All. Cunn.</i>	159	<i>Clitoria viridiflora</i> , <i>Bout.</i>	152
<i>Setigera</i> , <i>All. Cunn.</i>	166	<i>Coccinia Indica</i> , <i>W. & A.</i>	138
<i>Translucens</i> , <i>All. Cunn.</i>	160	<i>Crataeva Roxburghii</i> , <i>Br.</i>	178
<i>Thum squamipes</i> , <i>Hook.</i>	197	<i>Cymbidium plicatum</i> , <i>Harv.</i>	104
<i>Una uniflorum</i> , <i>Hook.</i>	157	<i>Dicranum Jamesoni</i> , <i>Hook.</i>	179
<i>Una parvifolia</i> , <i>Hook.</i>	116	<i>Diplazium cordifolium</i> , <i>Blume</i> ,	184
<i>Una dolabrifolium</i> , <i>Hook.</i>	191	<i>Douglasia nivalis</i> , <i>Lindl.</i>	180
<i>Arctica</i> , <i>Hook.</i>	150	<i>Elæocarpus coriaceus</i> , <i>Hook.</i>	154
<i>Arctica nitida</i> , <i>Pers.</i>	132	<i>pubescens</i> , <i>Hook.</i>	155
<i>Arctica phyllireifolia</i> , <i>Hook.</i>	122	<i>Escallonia polifolia</i> , <i>Hook.</i>	114
<i>Arctica Gardneri</i> , <i>Hook.</i>	190	<i>Euphorbia aphylla</i> , <i>Brouss.</i>	182
<i>Arctica Wightiana</i> , <i>Wall.</i>	176	<i>Fenzlia dianthiflora</i> , <i>Benth.</i>	199
<i>Arctica repanda</i> , <i>Presl</i> ,	183	<i>Geranium cuneatum</i> , <i>Hook.</i>	198
<i>Arctica acanthifolia</i> , <i>Hook.</i>	113	<i>Glyphocarpa Roylii</i> , <i>Hook. fil.</i>	194, C
<i>Arctica Dalhousiæ</i> , <i>Hook.</i>	105	<i>Grimmia laxifolia</i> , <i>Hook. fil.</i>	194, D
<i>Arctica mandulosa</i> , <i>Hook.</i>	106	<i>Guarea? microphylla</i> , <i>Hook.</i>	129
<i>Arctica rependens</i> , <i>Math.</i>	107	<i>Gymnogramma vestita</i> , <i>Wall.</i>	115
<i>Arctica racemosa</i> , <i>Lam.</i>	141	<i>Gymnopsis uniserialis</i> , <i>Hook.</i>	145
<i>Arctica microcephala</i> , <i>D C.</i>	147	<i>Gymnostomum setifolium</i> , <i>H. & A.</i>	135

	TAB.		TAB.
Hamadryas Andicola, <i>Hook.</i>	137	Pachyphyllum parvifolium, <i>Lindl.</i>	11
Harveya Capensis, <i>Hook.</i>	118	Palafoxia Texana, <i>Hook.</i>	14
Holothrix Harveiana, <i>Lindl.</i>	103, A	Polypodium biauriculatum, <i>Hook.</i>	12
parvifolia, <i>Lindl.</i>	103, B	Polytrichum semilamellatum, <i>Hook.</i>	
Hugelia virgata, <i>Benth.</i>	200	<i>fil.</i>	194, 1
Hymenoxis? linearifolia, <i>Hook.</i>	146	Pothos remotiflorus, <i>Hook.</i>	12
Ilex crassifolia, <i>Hook.</i>	149	scandens, <i>L.</i>	12
microphylla, <i>Hook.</i>	139	Pteris flexuosa, <i>Hook.</i>	11
Indigofera aspalathoides, <i>Vahl,</i>	188	Pterospermum reticulatum, <i>Wight,</i>	12
Iresine grandiflora, <i>Hook.</i>	102	Ranunculus sagittifolius, <i>Hook.</i>	17
Lindernia Capensis, <i>Th.</i>	151	Rhynchosia rufescens, <i>DC.</i>	18
Lindsæa macrophylla, <i>Kaulf.</i>	193	Rivina inæqualis, <i>Hook.</i>	12
Lisianthus daturoides, <i>Griseb.</i>	196	Shuteria glabrata, <i>W. & A.</i>	14
frigidus, <i>Sw.</i>	195	Sphyrospermum myrtifolium, <i>Hook.</i>	11
Lomaria Fraseri, <i>All. Cunn.</i>	185	Sterculia colorata, <i>Roxb.</i>	14
Lycopodium Jussieu, <i>Desv.</i>	186	Tephrosia suberosa, <i>DC.</i>	12
lepidophyllum, <i>Hook.</i>		Thibaudia acuminata, <i>Hook.</i>	11
<i>et Gr.</i>	162, 163	angustifolia, <i>Hook.</i>	11
Macleania floribunda, <i>Hook.</i>	109	elliptica, <i>R. & P.</i>	10
Marchantia trichocephala, <i>Hook.</i>	158	Trichomanes montanum, <i>Hook.</i>	18
Mimosa rubicaulis, <i>Lam.</i>	156	Vaccinium Emirnense, <i>Hook.</i>	13
Neurocalyx Zeylanicus, <i>Hook.</i>	174	secundiflorum, <i>Hook.</i>	13
Niebuhria linearis, <i>W. & A.</i>	124	Vallaris Pergularia, <i>Br.</i>	15
oblongifolia, <i>W. & A.</i>	127	Weissia campylocarpa, <i>Hook. et</i>	
Oligogyne Burchellii, <i>Hook.</i>	101	<i>Arn.</i>	13



TAB. CI.

OLIGOGYNE BURCHELLII.

GEN. CHAR. *Capitulum* pluriflorum heterogamum, fl. *radii* 1—5
 foemineis ligulatis, *disci* 6—8 hermaphr. tubulosis. *Involucr.*
 1-seriale erectum, squamis 5 ovali-oblongis foliaceis. *Recept.*
 planum, paleis lineari-lanceolatis (cuneatisve) planis. *Styli fl.*
herm. rami exserti hispidi. *Achenia* obcompressa seu teretius-
 cula submuriculata glabra aristis 2—4 conicis rigidis superata —
 Herbæ Americanæ, habitu *Sanvitaliæ*, *diffusæ*, *puberulæ*. Folia
opposita petiolata ovata serrata subtriplinervia. Pedicelli
axillares tricephali. Capitula parva. Flores flavi. Genus
 affine *Sanvitaliæ*. D. C.

Oligogyne Burchellii, pedunculis capitulo plerumque multo longi-
 oribus, acheniis oblongo-obovatis obtuse trigonis, paleis cunei-
 formibus apice incisis.

HAB. Rio Janeiro. Wm. J. Burchell, Esq. (n. 12.)

I think it will be seen from the above character of De Candolle
 that the present plant belongs to his Genus *Oligogyne*; notwith-
 standing some slight discrepancies, such as the included branches
 of the style in the discal florets, and the very different form of
 the paleæ. The former may be owing to the less advanced state
 of the flowers in our specimen; the latter can only be con-
 sidered of specific importance. Independent of this peculiarity
 in the paleæ, our plant does not well accord with the characters,
 slightly marked as they are, of any of that author's 3 species, of
 which two are from Brazil and one from Mexico.

Fig. 1. Capitulum. f. 2. radial floret with its palea. f. 3.
 discal floret with its palea. f. 4. achenium (scarcely mature).
 f. 5. an arista or scale of the pappus:—*magnified*.



TAB. CII.

IRESINE GRANDIFLORA.

Caule erecto tereti glabriusculo, foliis ovato-acuminatis glabris, paniculæ elongatæ foliosæ ramis patentibus subpubescentibus sæpissime trichotomis, spicarum floribus solitariis subglomeratisque, sepalis obtusis striatis, lana exserta.

HAB. Casapi, Cordillera of Peru. *Mathews.* (n. 1419.)

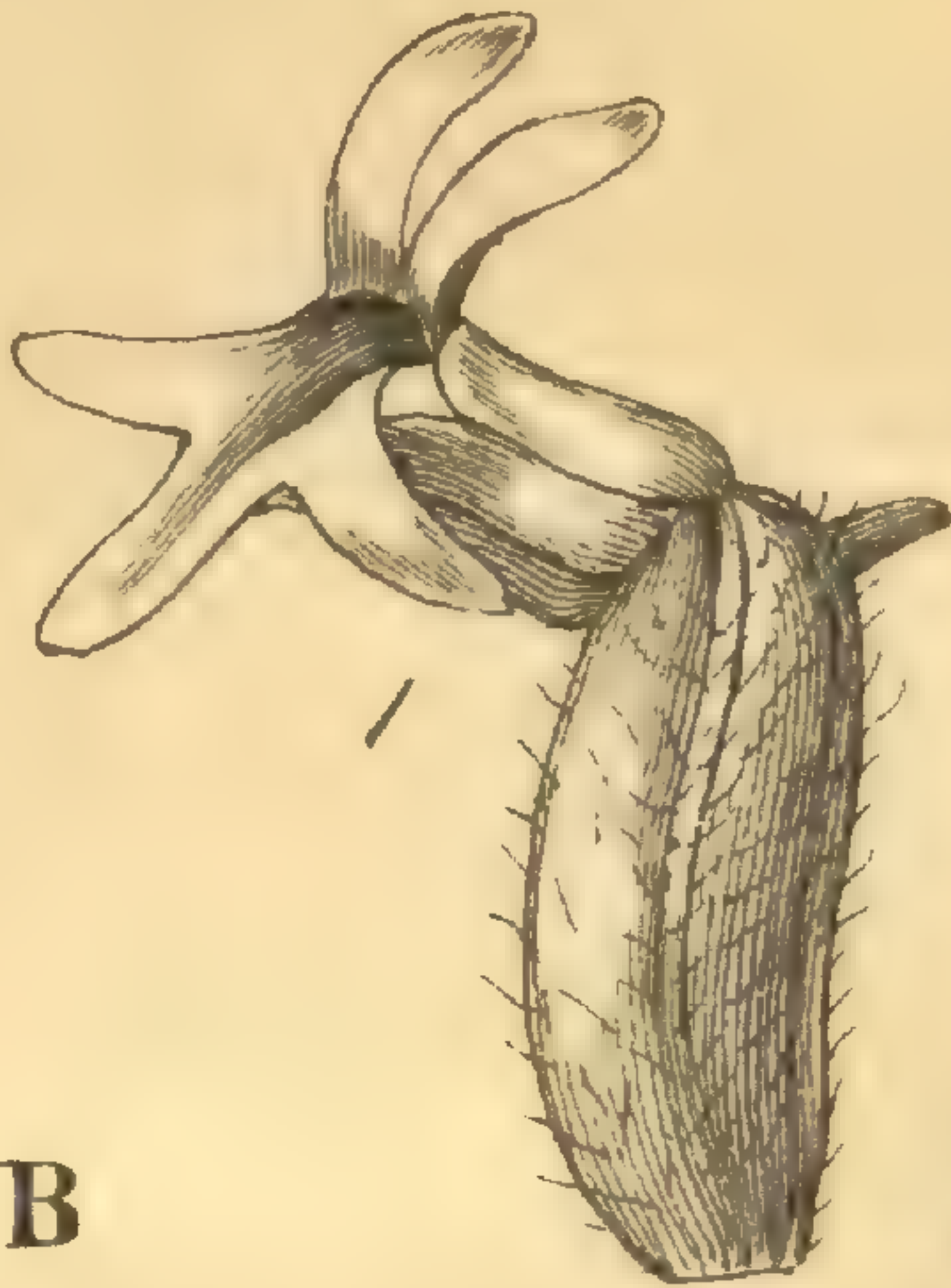
The Genus *Rosea* of Martius seems to me only to be distinguished from *Iresine* by having “polygamo-monoicous,” not diœcious, flowers:—a character, which, if important, is very difficult to be distinguished in the dried specimens. From all the species known to me of these genera, our plant is easily recognised by the larger flowers, and by their being distantly placed, and often but not always, solitary (rarely glomerated) upon the rachis of the spike. In these respects and indeed in the whole habit and ramification there is a striking affinity between *I. grandiflora* and the *Hebanthe paniculata*, Mart. Nov. Gen. tab. 140:—but the flowers of that plant have a very different “cupula staminea.” The anthers in ours are truly one-celled, though a different appearance is, by an error of the artist, given to some of them in the plate. The woolly hairs in the flowers are very copious, arising from the base of each of the two inner sepals.

Fig. 1. Flower with its bractea. *f.* 2. the same laid open:—*magnified.*



A

B



2

TAB. CIII. A.

HOLOTHRIX HARVEIANA.

Foliis binis ovatis strigosis, scapo retrorsum piloso, spica secunda multiflora, labello quinquelobo, laciniis lateralibus nanis acutis subæqualibus acutulis intermedia incurva, calcare horizontali abrupto subulato. *Lindl.*

Holothrix Harveiana. *Lindl. in Comp. to Bot. Mag. v. 2. p. 206.*

HAB. Low sandy moist plains, called "the Flats," which extend almost from Table Bay to False Bay; sometimes abundant.
Hon. W. H. Harvey.

Fig. 1. Side view of a flower. *f.* 2. front view of do:—*magnified.*

TAB. CIII. B.

HOLOTHRIX PARVIFOLIA.

Folio solitario ovato-subrotundo hispido, scapo strigoso, spica quaquaversa, labello concavo trilobo, laciniis ovatis patentibus, calcare conico horizontali labelli longitudine. *Lindl.*

Holothrix parvifolia. *Lindl. in Comp. to Bot. Mag. v. 2. p. 207.*

HAB. In the driest and most barren hills and wastes in a stony or gravelly soil, about Cape Town and Wynberg. *Hon. W. H. Harvey.*

For both the above drawings I am indebted to my valued friend the Hon. W. H. Harvey, Treasurer at the Colony, Cape of Good Hope, whose exertions in the cause of Botany have already been crowned with eminent success; and from whom much more may be expected.

Fig. 1. Flower. *f.* 2. bractea:—*magnified.*



Harveianæ.

N. O. Orchideæ.

TAB. CIV.

CYMBIDIUM PLICATUM.

Scapo erecto vaginato multifloro, spica ovata, bracteis ovario longioribus lineari-lanceolatis, sepalis erectis obtusis, labello trilobo, lobis lateralibus obtusis incurvis medio truncato involuto ciliato, foliis radicalibus ensiformibus plicatis scapo longioribus.
Lindl.

Cymbidium plicatum. *Harv. mst.—Lindl. in Comp. to Bot. Mag. v. 2. p. 203.*

HAB. Wet spots by the sides of drains and in marshes on “the Flats” near Wynberg, rare. Dec. 1835. *Hon. W. H. Harvey.*
I am indebted to Mr. Harvey for the drawing here given.

Fig. 1. Side view of a flower. *f.* 2. Sepals, petals, and lip. *f.* 3. Column and lip. *f.* 4. Front view of the column. *f.* 5. Anther-case. *f.* 6. Pollen-masses :—*magnified.*



TAB. CV.

ASPLENIUM DALHOUSIÆ.

Frondibus cæspitosis lanceolatis pinnatifidis glabris utrinque nudis, laciniis horizontalibus oblongo-ovatis obtusis integerrimis, stipite perbrevis rachideque inferiore subtus paleaceis.

HAB. Simla, in the Himalaya. *The Hon. the Countess Dalhousie.*

This is undoubtedly a true *Asplenium* : and if the underside were covered with scales as in the *Grammitis Ceterach* of our European rocks and walls, it would be scarcely possible to distinguish it from that plant. It will be recollected too, with regard to *G. Ceterach*, that Mr. Wilson finds “evident traces of an involucre, a narrow membrane on the lower side of the sorus :” so that I think that well-known plant must be referred to *Asplenium* and placed next our present one. And they are, if I am not mistaken, the only species of the extensive genus *Asplenium* which have truly pinnatifid fronds.

In the species here figured, besides the sori upon the segments of the frond, opening towards the central nerve, there is a chain or series parallel with the main rachis, and opening towards it, thus turning their backs, as it were, to those situated on the segment.

Fig. Portion of the frond and segment with the fructifications :
—magnified.



TAB. CVI.

ATROPA GLANDULOSA.

Caule suberecto fruticoso, foliis geminis cordato-ovatis longe petiolatis calyceque profunde 5-partito pubescenti-glandulosis, corolla longe tubulosa, stylo staminibusque inclusis.

Atropa glandulosa. *Hook. in Bot. Misc. v. 2. p. 230.*

HAB. Peru; Huaylluay, near Pasco, *Alex. Cruckshanks, Esq.*

Crevices of rocks at Pasco. *Mathews (n. 667.)*

A description taken from Mr. Cruckshanks' dried specimens of this plant is given in the Botanical Miscellany above quoted. Our present figure is executed by Mr. Mathews from recent native plants, and he has sent me the following observations. "I find the plant oftener erect than procumbent. It grows from beneath and out of the interstices of the rocks on various parts of the Cordillera. When procumbent, this circumstance is caused by its having been repeatedly eaten down to the hard branches by the sheep. The corolla in the recent state is clammy, pale-sulphur, inclining to citron-colour: laciniae frequently imperfectly 3-lobed, at length reflexed. The berry is green. The greatest height of the plant is from 2—3 feet, and it flowers during nearly the whole year."

Fig. 1. Corolla laid open. *f.* 2. Berry :—*natural size.*



TAB. CVII.

ATROPA DEPENDENS.

Caule pendente fruticoso, foliis geminis cordato-ovatis brevipetiolatis glabris, calyce tubuloso tenui-pubescente 5-fido demum (fructifero) ampliato hinc fisso bacca longiore, corolla longe tubuloso, stylo staminibusque exsertis.

Atropa dependens. *Mathews mst.*

HAB. Eastern side of the Cordillera of Peru. *Mathews* (n. 829.)

Mr. Mathews has favoured us with the drawing of this plant also from Peru, and remarks that it is "a slender wiry branching plant generally growing from the root of some tall shrub, among whose branches it rambles for support, extending from 10—15 feet, its ultimate pendent extremities being covered with large sulphur-coloured flowers. It is an Alpine species, descending to where the potato begins to be cultivated: but it is to be observed that the climate is moister than the same altitude on the western side of the Andes." Besides the widely different size and habit from the last described species (*A. glandulosa*) the calyx is much larger and tubular, still further increasing in size as the fruit advances to maturity, which it quite envelopes, bursting on one side. The segments of the corolla are nearly erect, and all of them gradually acuminate. The stamens and style are much exserted.

Fig. 1. Calyx and pistil. *f.* 2. Berry :—*natural size.*



TAB. CVIII.

THIBAUDIA ELLIPTICA.

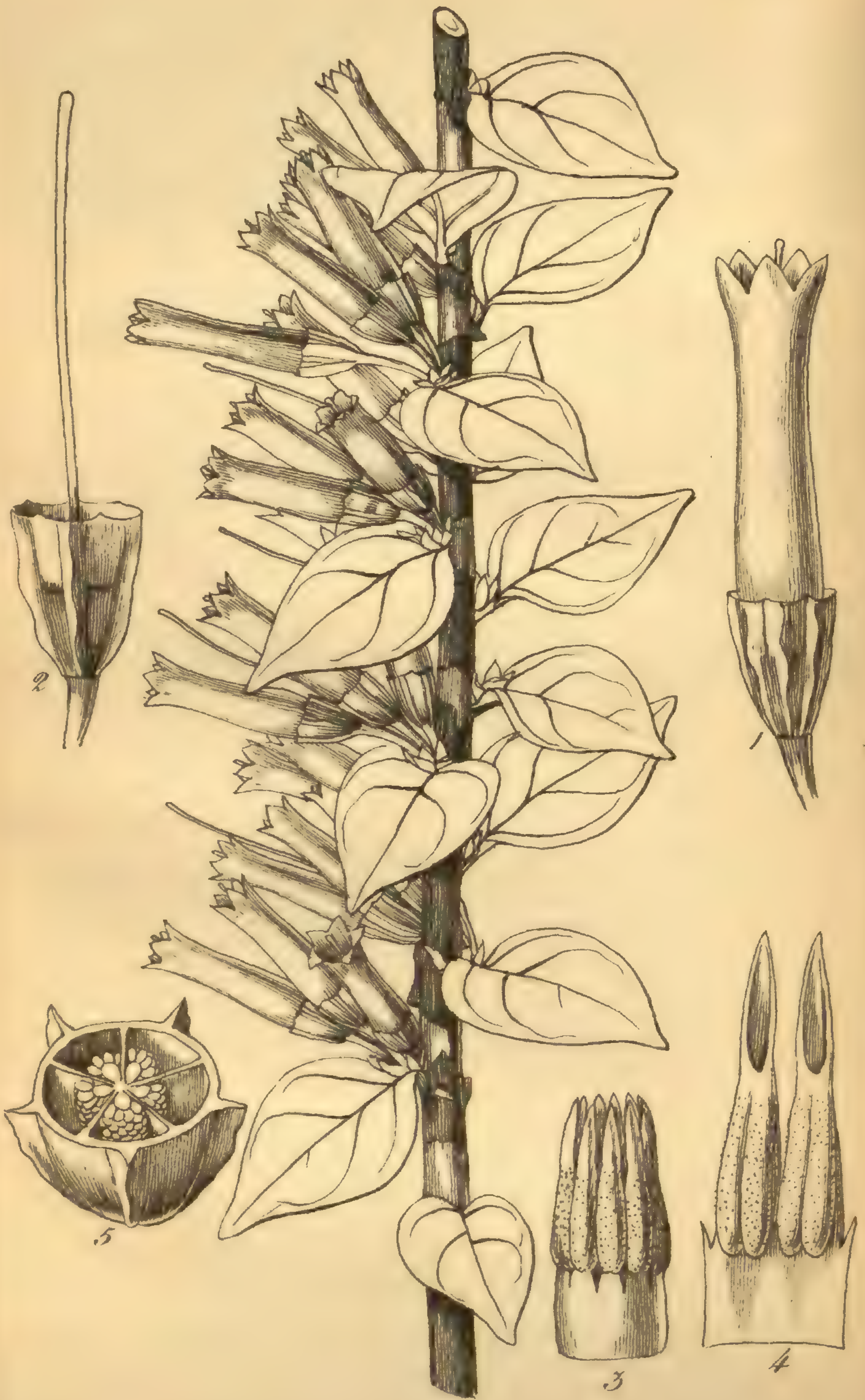
Ramis obtuse angulatis, foliis ellipticis obtusis mucronatis penninerviis brevissime petiolatis subtus sparsim punctatis, racemis densis glomeratis axillaribus terminalibusque, bracteis parvis, corollis cylindraceis, staminibus longitudine fere tubi, filamentis in urceolum omnino connatis, antheræ tubis longissimis poro terminali dehiscentibus.

Thibaudia elliptica. Ruiz, et Pav. *Fl. Peruv. v. 4. Ic. ined. t. 383* (absque corollis).

HAB. Cuesta of Huanacabra, Andes of Peru. *Mathews. (n. 884.)*

This must be an extremely beautiful plant in a living state with its dense clusters of large scarlet flowers nestled among the evergreen foliage. I refer it to the *T. elliptica*, because I think the figure, though destitute of perfect flowers, sufficiently accords, and I am unwilling to multiply species unnecessarily. In regard to the Genus I am quite unable to say whether it should be referred to *Thibaudia* or *Ceratostemma*; for I cannot understand what are the essentially distinguishing marks between them: indeed I am rather inclined to think the two Genera are not different. Those who have had the best opportunity of judging of them are not agreed as to their generic characters. Jussieu was ignorant of the fruit of his *Ceratostemma*; and Ruiz and Pavon, who have figured 3 species (there are no descriptions to the 4th vol.) do not represent the fruit. Kunth says, “*Ceratostemma*, Juss. *Thibaudia* congener, nisi fructus in illa *capsularis*.” Poeppig ascribes to both a *berried* fruit, but observes under *Ceratostemma*;—“Genus *Thibaudiæ* nimis affine, filamentis manifestius in urceolum connatis antherarum basi fixarum loculis rimula introrsum laterali dehiscentibus et baccis costatis, quæ tamen etiam in *Thibaudia Quereme* Humb. saltem pentagonæ sunt, ægre distinguendum.” Our present plant would be a *Ceratostemma* of Poeppig were it not for the anthers opening by a small pore, instead of a long rima.

Fig. 1. Flower. *f. 2.* Corolla and column of stamens laid open:—*magnified.*



TAB. CIX.

MACLEANIA FLORIBUNDA.

GEN. CHAR. *Calyx* truncatus obsoletissime 5-dentatus, 5-alatus, inferne ovario adhærens. *Corolla* cylindracea, limbo 5-fido. *Stamina* decem basi corollæ inserta, filamentis per totam longitudinem in urceolum connatis. *Antheræ* basi affixæ, dorso muticæ, apice in tubum simplicem attenuatæ et rimula singula introrsum dehiscentes. *Ovarium* 5-loculare, multiovulatum. *Fructus* :—*Bacca* ?—Frutex habitu Thibaudiæ vel *Ceratostemmis*. Flores numerosæ axillares secundi. Folia subsecunda. Rami cortice deciduo.

Macleania floribunda.

HAB. Jambrasbamba, in the Andes of Peru. Mathews (n. 1442.)

A *shrub*, glabrous in every part, with rounded woody branches, from which the dark-coloured glossy bark is readily deciduous. The *leaves* are an inch or more long, subsecund ovato-acute, feather-nerved, coriaceous, beneath paler and obscurely dotted. *Peduncles* in fascicles from the axils of the leaves, but pointing all to one side, and for the most part opposite to the direction of the leaves, short, articulated below the calyx. *Calyx* truncated, with five excessively minute teeth, and furnished with five longitudinal wings; the lower half adnate with the five-celled many-ovuled *ovary*. *Corolla* an inch or more long, cylindrical, the *limb* five-toothed, the *faux* hairy. *Filaments* combined for their whole length into a membrane, at the margin of which the ten *anthers* are fixed; these are granulated, much shorter than the corolla, two-celled, tapering into a single tube, which opens interiorly by a single longitudinal cleft. *Fruit* ?

I have named this beautiful Genus as a just compliment to John Maclean, Esq. of Lima, who has introduced many excellent living plants to our collections, and by his generous and friendly assistance has mainly contributed to the success which has so eminently attended Mr. Mathews' researches.

Fig. 1. Flower. f. 2. Calyx and pistil. f. 3. Stamen. f. 4. Portion of do. f. 5. Section of the Ovary :—*magnified*.



TAB. CX.

THIBAUDIA ANGUSTIFOLIA.

Foliis oblongo-lanceolatis acutiusculis subsessilibus obscure penninerviis marginibus recurvis serratis,* pedunculis axillaribus aggregatis pendulis basi parvi-bracteatis 1—3 floris, corolla brevi-cylindraceis, staminibus tubo brevioribus, filamentis in urceolum brevem connatis, antheræ tubis elongatis rima elongata dehiscentibus, stylo exserto.

HAB. Andes of Peru. Taulia (n. 1443) Prov. of Chacapoyas. (1836) *Mathews*.

The stamens here entirely agree with those of *Ceratostemma*, according to Poeppig, while those of our Tab. 108, have the united filaments of *Ceratostemma* and the minute terminal pore of the tubes of the anther of *Thibaudia*—thus appearing intermediate. As far as I am aware, the only *Thibaudia* (including *Ceratostemma* of authors) which has serrated leaves is the *T. caulialata* of Ruiz and Pavon, *Fl. Peruv. v. 3. Ic. Ined. t. 386*; but that is widely removed from the present species by the nature of the branches, form and size of the leaves, inflorescence and stamens.

Fig. 1. Flower. *f.* 2. corolla and column of stamens laid open. *f.* 3. portion of the staminal tube with two anthers:—*magnified*.

* We regret that owing to the artist looking chiefly at the upper side of the leaves he has omitted the serratures, which indeed, on account of the recurvation of the margin, are only seen from beneath; and lithography unfortunately does not admit of any alteration being made after a proof has been taken, till which time the error was not discovered.



TAB. CXI.

THIBAUDIA ACUMINATA.

Foliis ellipticis basi acutis apice longe acuminatis subquintuplinerviis subtus punctatis, racemis axillaribus terminalibusque bracteatis, bracteis longitudine florum, corollis cylindraceis, staminibus longitudine corollæ liberis.

HAB. Plains of Quito. *Col. Hall.* (n. 40).

Frutex ramosus, ramis cortice cinereo-fusco obtectis. *Folia* 3—4 pollicaria, coriacea, brevi-petiolata, coriacea, glabra, subquintuplinervia, basi acuta, apice longe acuminata, subtus pallida, punctata, nervis prominentibus. *Racemi* terminales et in axillis supremis, folio breviores, bracteati, bracteis ellipticis obtusis. *Pedicelli* semiunciam longi. *Calycis limbus* ovarium globosum glabrum coronans, 5-dentatus. *Corolla* pollicaris cylindracea, apice 5-fida. *Stamina* 10, basi corollæ inserta. *Filamenta* brevia. *Antheræ* longitudine fere corollæ, loculis longe bicornubus. *Stylus* subinclusus.

Colonel Hall observes that the fruit of this is fragrant and eatable.

Fig. 1. Flower. *f.* 2. Stamens :—*magnified.*



TAB. CXII.

SPHYROSPERMUM MYRTIFOLIUM.

Foliis ovato-lanceolatis acutis, ramis pedunculis calycibusque hirsutissimis, ovario quadriloculari.

HAB. Bagasan, Andes of Peru. *Mathews* (n. 1466.)

A Genus established by Poeppig and Endlicher, including *S. buxifolium* and *S. longifolium* of the Peruvian Andes, and chiefly distinguished from *Vaccinium*, “simplici dentium calycinorum numero nec non et placentarum situ. Semina fere *Vaccinii Myrtilli*, sed integumentum exterius carnosum-succosum, arillum mentiens.”

Our species constitutes a *shrub* with very hairy *branches* and with numerous *leaves*, of a narrow lanceolate form, coriaceous texture, entire at the margins, which are revolute, glabrous on both sides, slightly veiny and glossy above, beneath paler, veinless and opaque. *Peduncles* 1—3 from the axils of numerous leaves, and shorter than they, curved downwards, very hairy as is the calyx, with long patent hairs. *Calyx* of 4—5 teeth. *Corolla* campanulate, 4—5-fid, the segments erect. *Stamens* 4—6, inserted on the limb of the calyx. *Filaments* short. *Anthers* two-celled, each cell glandular, tapering into a rather thick tube dilated and open at the mouth. *Ovary* four-celled.

Fig. 1. A bud. *f.* 2. A flower. *f.* 3. Flower, the corolla being removed. *f.* 4. Stamen. *f.* 5. Calyx and pistil. *f.* 6. Ovary cut through transversely :—*magnified.*



TAB. CXIII.

APHELANDRA ACANTHIFOLIA.

Sericeo-pubescent, foliis late ovato-lanceolatis acuminatis grosse serratis apice serraturisque spinescentibus, petiolis brevissimis ad basin spinosis, spicis terminalibus aggregatis densifloris, bracteis ovatis sepalisque lanceolatis apice spinescentibus, corolla sericea, staminibus styloque exsertis.

HAB. Province of Chacapoyas, Peru. *Mathews*, 1836.*

Planta singularis, pulcherrima. *Folia* spithamæa, penninervia, nervis approximatis numerosis. *Spicæ*, in nostro exemplari, ternæ, pedunculatæ. *Bracteæ* majusculæ, concavæ, ciliatæ, calyce majores. *Corolla* 2—2½ uncias longa, sericea, tubulosa; limbo bilabiato, labiis patentibus, superiore bifido, inferiore trifido, lacinia intermedia majore, concava, subcymbiformi, acuta. *Stamina* 4, exserta. *Antheræ* lineares, 1-loculares. *Stylus* filiformis, staminibus longior. *Capsula* longitudine bracteæ persistentis, elliptica, substantia dura, nitida, bilocularis, bivalvis. *Loculi* dispermi. *Semen* ovale, punctatum, singulo retinacula carnosâ sustentato.

Fig. 1. Flower. *f.* 2. Capsule. *f.* 3. One of the valves with two seeds :—*magnified*.

* The only collection that came in 1836 was unfortunately not numbered by Mr. Mathews.



TAB. CXIV.

ESCALLONIA POLIFOLIA.

Pubescens glutinosa, foliis lineari-oblongis marginibus recurvatis integerrimis supra nudiusculis subtus dense pubescentibus, pedunculis solitariis terminalibus unifloris longitudine foliorum, calycis tubo subhemisphærico brevi glanduloso dentibus e lata basi subulatis.

HAB. Province of Chacapoyas. *Mathews*, 1836.

Rami glabriusculi, fusci; ramuli pubescentes, breves, foliosi.

Folia sparsa, vix unciam longa, lineari-oblonga, rigida, supra læviter subtus dense pubescentia, marginibus revolutis, omnino integerrimis. *Pedunculi* terminales, solitarii, vix longitudine foliorum, cernui, uniflori, superne tuberculati. *Calyx* pubescens, tuberculatusque. *Tubus* perbrevis, subhemisphæricus: dentibus 5, erectis, e lata basi subulatis. *Petala* 5, calycem triplo excedentia, erecta, spathulata, apice recurvata. *Stamina* 5, corolla breviora: *Filamentis* filiformibus: *Antheris* oblongis. *Ovarium* subsemiinferum: *Stylus* longitudine staminum, crassus, flexuosus: *Stigma* dilatato-capitatum.

I do not find any description of an *Escallonia*, at all coinciding with this species, which has the habit of *E. serrata* of Smith, but with extremely different leaves.

Fig. 1. Flower. *f.* 2. Calyx and pistil:—*magnified*.



TAB. CXV.

GYMNOGRAMMA VESTITA.

Tota stipite rachi frondibusque pinnatis (subtus præcipue) pilis fulvis copiosis sericeis vestita, fronde pinnata, pinnis subcordato-ovatis brevissime petiolatis obtusis, soris copiosis obliquis furcatis.

Grammitis vestita. *Wall. Cat. of Pl. in E. I. C. Mus. (n. 12.)*

HAB. On the loftiest mountains of Kumaon (*Robert Blenkworth*), *Wallich*. Near Tago, Himalaya, *The Hon. the Countess Dalhousie*.

Caudex repens, dense squamoso-hirsutus, fibrosus. *Stipites* digitales ad spithamæam, erecti, dense pubescenti-hirsuti. *Fronde*s stipitem æquantes, oblongo-lanceolatae, pinnatae, pinnæ remotiusculæ, suboppositæ; majores vix unciam longæ, cordato-oblongæ seu ovatae, obtusæ, brevissime petiolatae, integerrimæ, utrinque (subtus præcipue) pilis pulcherrime sericeis aureo-fulvis nitidis tectæ. *Sori* angusti, graciles, furcati. *Capsulæ* globosæ, annulatae, sessiles. *Semina* subglobosa, parum angulata.

An extremely beautiful species, to which our plate unfortunately does no justice.

Fig. 1. Underside of a fructified pinna. *f.* 2. Capsule. *f.* 3. Seeds :—*magnified*.



TAB. CXVI.

ADENARIA PARVIFOLIA.

Ramulis foliisque junioribus præcipue ad nervos pubescentibus, foliis oblongis utrinque attenuatis brevi-petiolatis glabris subtus pallidioribus nigro-punctatis subcoriaceis, umbellis brevipedunculatis, calycibus 4-fidis, staminibus inclusis.

HAB. Prov. of Chacapoyas, Peru. *Mathews*, 1836.

Frutex, ramis ramulisque subteretibus, junioribus tenuiter pubescentibus. *Folia* opposita, sesquiunciam longa, subcoriacea, penninervia, vix reticulata, oblonga, acuminata, integerrima, basi in petiolum perbreve attenuata, glabra, subtus pallida, nigropunctata. *Umbellæ* axillares, plurifloræ, pedunculatæ, pedunculo pedicellisque 2 lineas longis. *Calyx* turbinatus, petalisque oblongo-spathulatis, extus glandulis majusculis punctatus. *Stamina* 8, brevia, calyci infra medium inserta. *Ovarium* subglobosum, supra hirsutum, nigro-glandulosum, inferne nudum, in stipitem brevem attenuatum: *Stylus* longitudine ovarii: *Stigma* bilobum. *Capsula* calyce persistente semitecta, globosa, indehiscens? bilocularis. *Receptacula* dissepimento affixa. *Semina* numerosa, parva.

If this plant be compared with the specific character alone of *Adenaria grisleoides* H. and K. (from the banks of the Magdalena) it will be found almost entirely to agree; but besides the widely different locality of the two, we find from the *description*, that Humboldt's plant has the leaves "32—36 lines long, thin and membranaceous, reticulated with veins and the stamens exserted:" hence I am led to consider the present as a new species. A second of the genus has been sent by Mr. Mathews, among his earlier collections, from the Quebrada of Panahuanca, *n.* 824; the *Adenaria floribunda* H. and K. It is a tree, 15—20 feet high, the flowers and leaves larger than in our present species, the latter as well as the branches and umbels very downy.

Fig. 1. Flower. *f.* 2. Calyx laid open with the stamens. *f.* 3. Pistil. *f.* 4. Capsule cut open:—*magnified.*



TAB. CXVII.

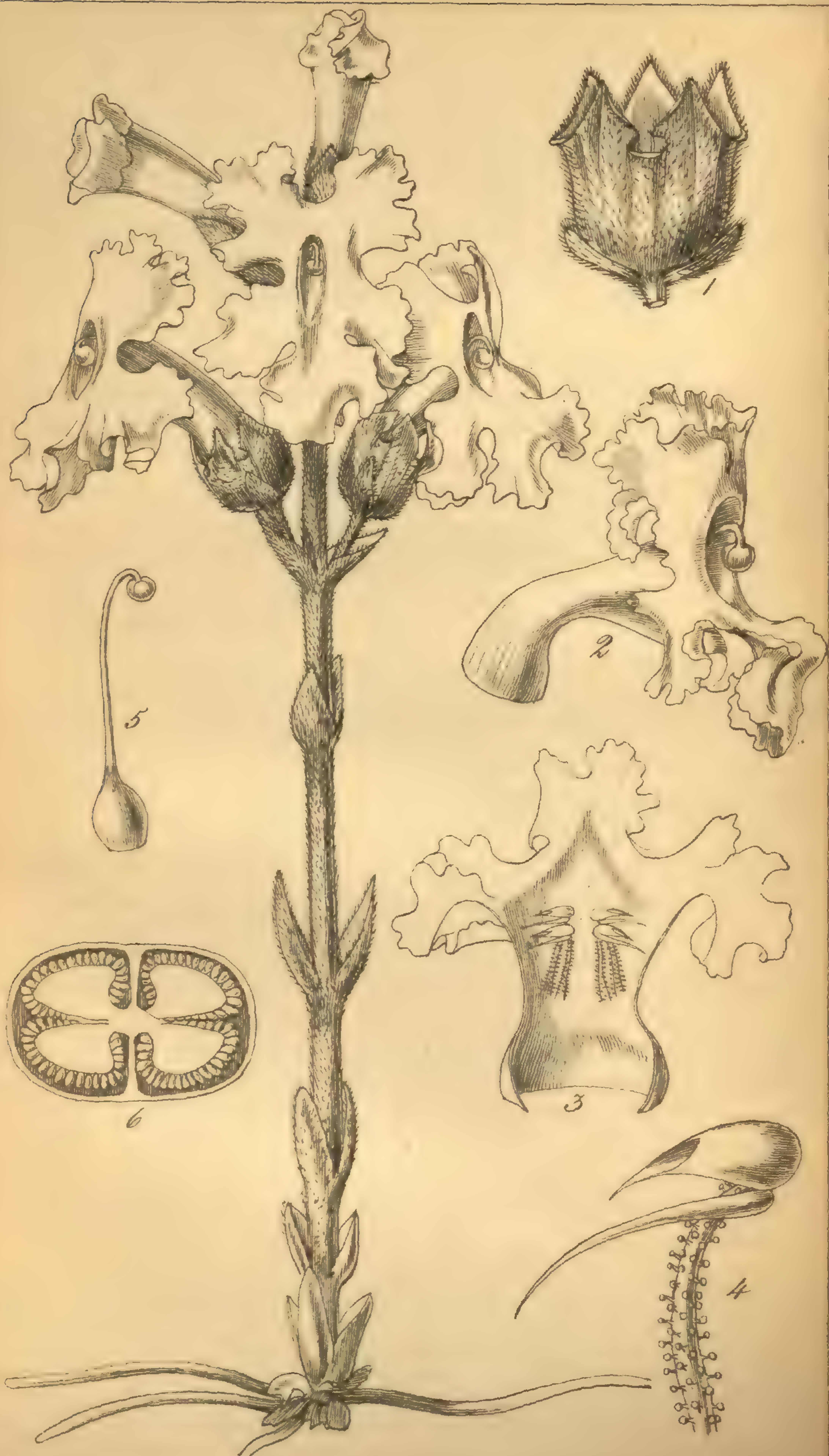
PACHYPHYLLUM PARVIFOLIUM, *Lindl.*

Foliis ovalibus planis, spicis subæqualibus, labello mutico. *Lindl.*

HAB. Chacapoyas, Peru. *Mathews*, 1836.

Hitherto only one species of this Genus has been described, the *P. distichum* of Humboldt and Kunth (*Nov. Gen. et Sp. v. 1. t. 77.*) an inhabitant of Loxa and Gonzana in Peru. From that our plant is abundantly distinguished by its much slenderer stems, smaller and by no means falcate leaves, and by the few (apparently constantly) 3-flowered spikes. The sepals are singularly grooved and carinated: the labellum, (scarcely differing in form from the petals) is destitute of tubercles, which have been considered an essential character of the Genus: but Professor Lindley doubts whether those represented by Humboldt are not so done by mistake.

Fig. 1. Spike of flowers. *f.* 2. Single flower, side view. *f.* 3. Column and petals. *f.* 4. Lateral sepal. *f.* 5. Pollen-mass:—*magnified.*



TAB. CXVIII.

HARVEYA CAPENSIS.

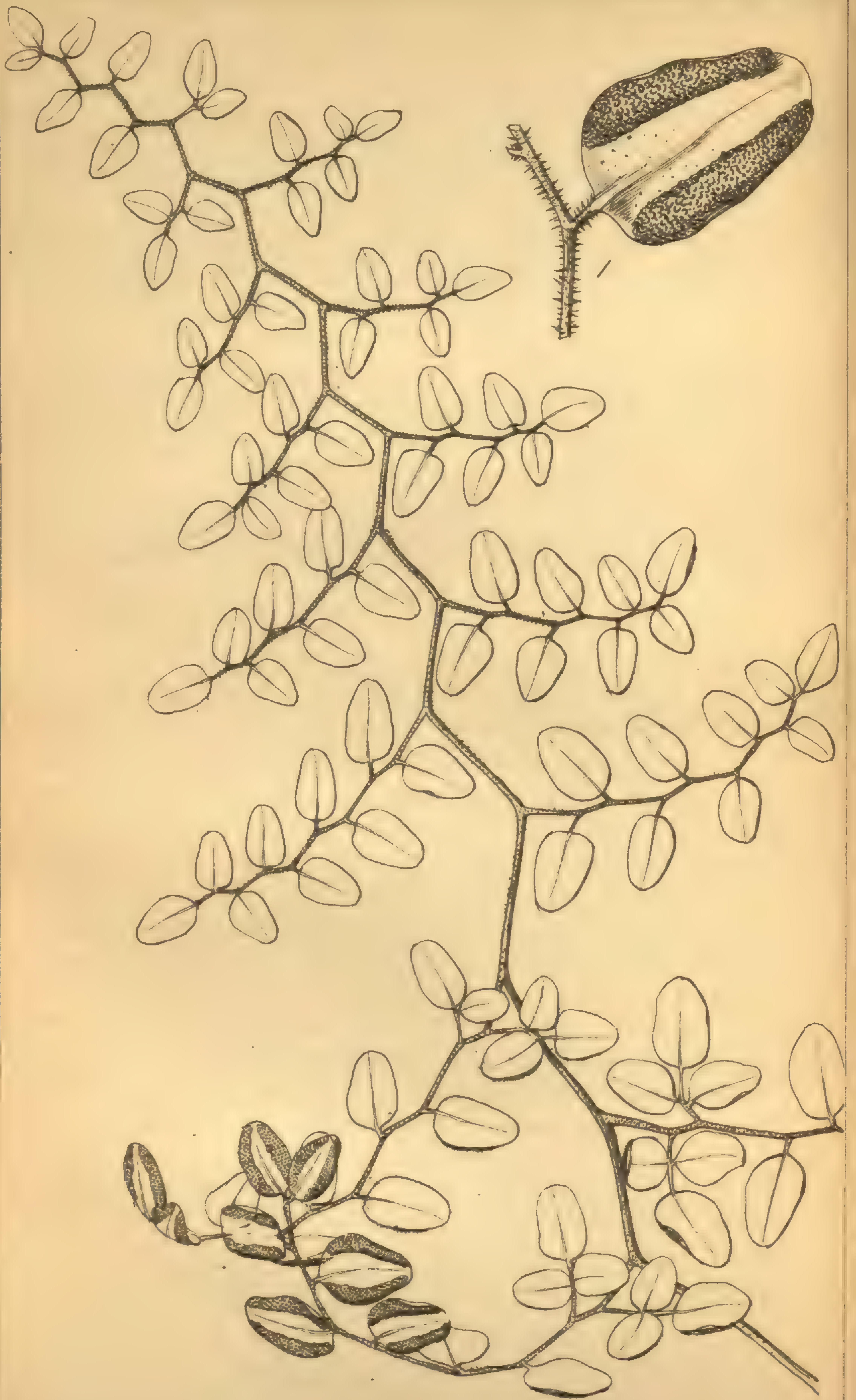
GEN. CHAR. *Cal.* inflato-campanulatus, basi truncatus, 5-fidus, 10-costatus, segmentis acutis marginibus recurvis. *Cor.* ringens, tubo exserto, curvato, superne inflato, fauce compressa, limbo bilabiato 5-fido, sinubus obtusis, laciniis $\frac{2}{3}$ obovatis, undulatis. *Stam.* 4, didynama, medio tubi inserta, inclusa; *Filamenta* brevia, glanduloso-pilosa; *Antheræ* biloculares, loculo unico fertili, ovato, acuminatissimo, apice poro dehiscente; altero (inferiore) abortivo, subulato, duplo longiore. *Ovarium* ovatum, biloculare; placentis 4 dissepimenti medio affixis. *Stylus* erectus, exsertus. *Stigma* capitatum. *Fructus*?—Herba *parasitica, simplex v. ramosa, aphylla, pilis glandulosis fulvis subviscidis ubique obsita*. Caulis *squamosus, squamis oppositis*. Flores, *ex axillis squamarum superiorum, magni, pallide rosei*. Pedicelli *infra calycem bibracteati*.

Harveya Capensis.

HAB. On a dry hill between Wynberg and the Camp ground, parasitical on the roots of *Blairia muscosa* and other small Heaths, not uncommon, flowering in January. Since found in plenty in various sandy places on "the Flats." Hon. W. H. Harvey. I have also received specimens from Dr. Thom, M. Villet, and Dr. Sieber.

This remarkable plant I am anxious should bear the name of the Hon. W. H. Harvey, Treasurer of the Colony, Cape of Good Hope, who during his former brief visit to Southern Africa amassed a very valuable collection, which has been distributed among his friends with the liberality of a Wallich and a Wight, and who is already well known by his admirable descriptions of Algæ. To him I am indebted for specimens of the present plant and for an excellent figure, analysis, and description: but I am unable to refer it to any known Genus. It has the habit of *Orobanchæ* and it may be included among the imperfectly described species of *Orobanche* of Thunberg: but the structure of the ovary forbids its being united with that family. I refer it to *Scrophularinæ*, though I am unable to say in which of the sections of Mr. Bentham it should be placed; perhaps among *Buchnereæ*.

Fig. 1. Calyx and bractæas. f. 2. Corolla. f. 3. The same laid open. f. 4. Stamen. f. 5. Pistil (nat. size). f. 6. Ovary cut open:—all but f. 5, more or less magnified.



TAB. CXIX.

PTERIS FLEXUOSA.

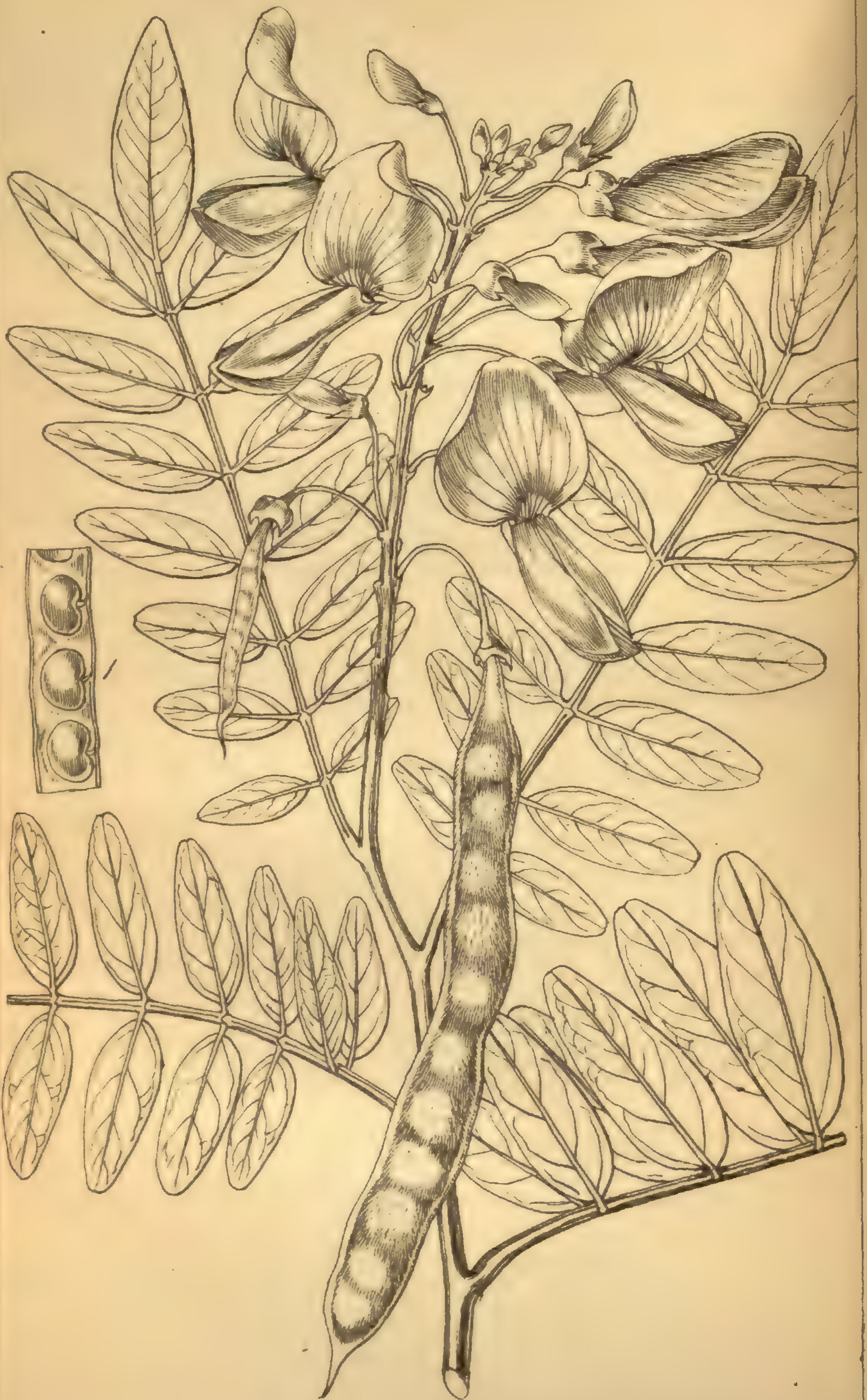
Fronde bi- subtri-pinnata, pinnulis petiolatis cordato-ovatis obtusis, rachidibus omnibus insigniter flexuosis junioribus pubescenti-hispidis, soris ad margines laterales continuis vix ad apicem attingentibus.

HAB. Province of Chacapoyas, Peruvian Andes. *Mathews*, 1836.

Filix spithamæa ad pedalem et ultra. *Stipes* digitalis, teres, fuscus, nitidus. *Frons* circumscriptione ovato-lanceolata, bi-inferne subtri-pinnata; pinnis primariis deflexis, longioribus 3—4 pollicaribus; pinnulis remotis, lateralibus deflexis, terminali recta, omnibus cordato-ovatis subcoriaceis, glabris, obtusis, integerrimis, obscure costatis, aveniis, brevi-petiolatis. *Rachides* omnes insigniter angulato-flexuosæ, primaria præcipue; secundaria pubescenti-hispida. *Sori* continui, ad margines laterales pinnæ siti, sed vix ad apicem attingentes.

A most distinct species of a very extensive Genus (of which Dr. Agardh, son to the learned Algologist, is now preparing a monograph) remarkable for the very flexuose or zigzag rachis, especially the primary one: the secondary ones are less distinctly so, but they are singularly deflexed.

Fig. 1. Portion of a rachis with a pinna, seen from beneath:—*magnified*.



TAB. CXX.

TEPHROSIA SUBEROSA.

Arborescens erecta ramosa, ramis junioribus tomentosis, cortice suberoso-rimosa, foliis pinnatis, foliolis 6—10 jugis elliptico-oblongis obtusis mucronulatis supra glabris nitidiusculis subtus sericeis, racemis terminalibus, floribus speciosis geminis longe pedicellatis, calycis campanulati dentibus brevibus, carina rectiuscula, vexillo pubescente, stylo glabro, leguminibus longis rectis sericeo-pubescentibus inter semina constrictis. *W. et A.*

Tephrosia suberosa. *De Cand. Prodr. v. 2. p. 249. Wall. List, n. 5628. Wight, Cat. n. 882, 883. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 210.*

T. sericea. *De Cand. l. c. (non Pers. nec De Cand. l. c. p. 255) Wall. List, n. 5629.*

Cytisus sericeus. *Willd. Sp. Pl. v. 3. p. 1121.*

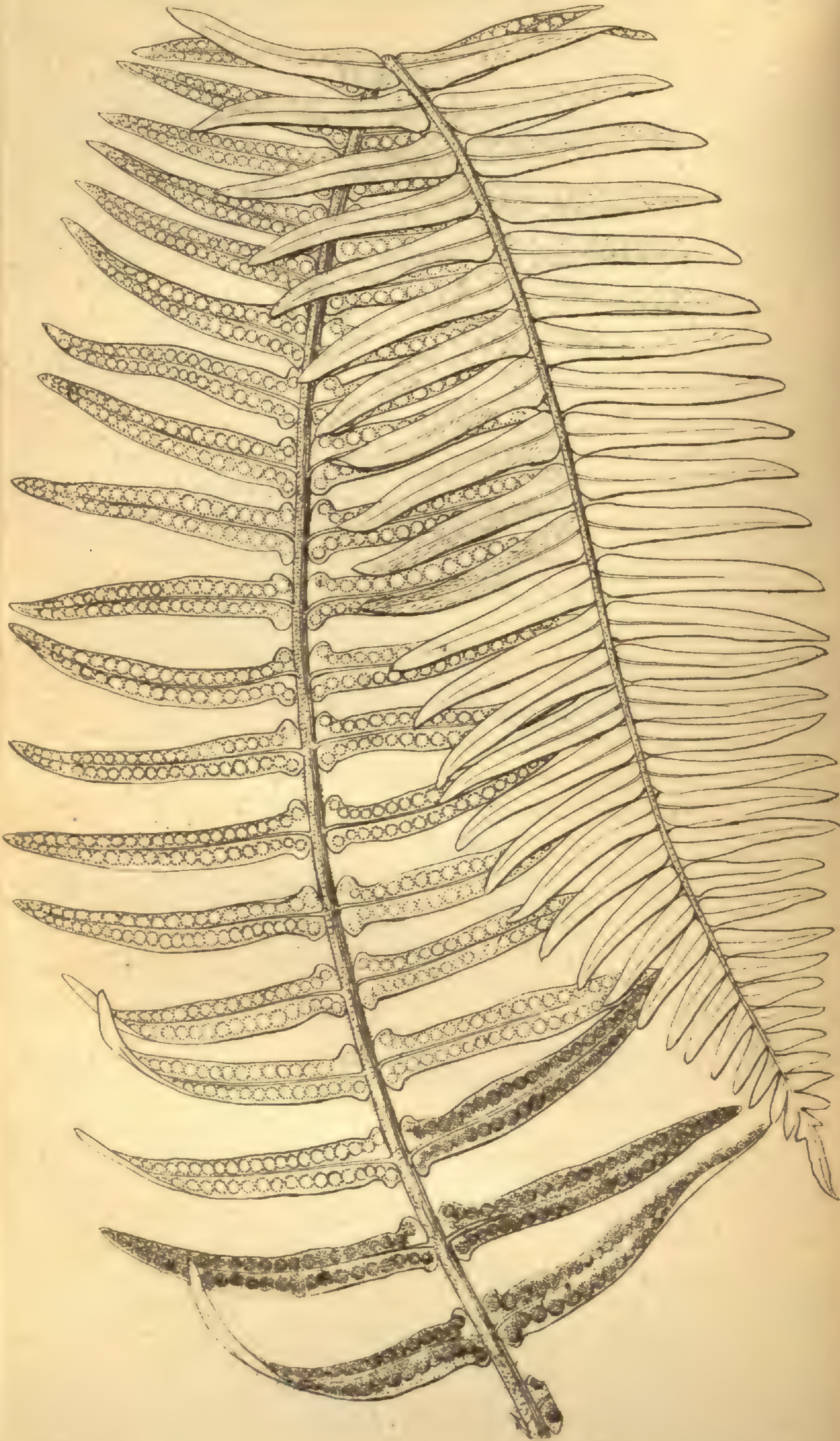
Robinia suberosa. *Roxb. Fl. Ind. v. 3. p. 327.*

R. sennoides. *Roxb. Fl. Ind. v. 3. p. 328.*

HAB. Alpine valleys in Mysore, Madura, Tinnevelley and Northern Circars (not in Tranquebar). *Dr. Wight.*

Flowers large, of a deep purple rose colour.

Fig. 1. Portion of a valve of the Legumen, with seeds.



Mathewsianæ.

N. O. Filices.

TAB. CXXI.

POLYPODIUM BIAURICULATUM.

Fronde lato-lanceolata pinnata, pinnis sessilibus plerisque oppositis approximatis patentissimis lineari-lanceolatis integerrimis basi utrinque auriculatis supra pilosiusculis subtus rachibusque dense pubescentibus, soris copiosis uniserialibus intra costam et marginem.

HAB. Chacapoyas, Peru. *Mathews*, 1836.

The stipes is about 6 inches long, terete, dark brown, opaque, slightly downy. The fructifications are exceedingly copious, occupying nearly the whole underside of the pinnæ, and throughout the whole length of the frond.



TAB. CXXII.

ANDRŌMEDA PHYLLYREIFOLIA.

Glaberrima, foliis sempervirentibus ellipticis oblongisve brevissime petiolatis coriaceis nitidis marginibus revolutis apice obscure serratis, racemis laxis axillaribus folio longioribus, calyce profunde 5-partito, corolla ovaliore 5-dentato, filamentis dilatatis bicruris, antheris ovatis bifidis dorso biaristatis.

HAB. Apalachicola, W. Florida. *Mr. Drummond, (n. 27.)*

This is decidedly a new and very beautiful species which cannot be confounded with any I have ever seen. It would seem from the long rather straight branches that it forms a *shrub* of considerable height, flowering in great perfection in the latter end of January and beginning of February. The *leaves* are truly elliptical or oblong-obtuse, glossy, when dry distinctly reticulated with copious veins, the margin revolute. *Racemes* numerous, handsome. *Bractea*, at the base of the pedicels, minute, subulate. *Calyx* cleft to the base into 5 upright, lanceolate segments, half as long as the corolla, which latter appears to be greenish-white, slightly tinged with red. *Filaments* broad, singularly curved or folded twice below the anther. *Germen* ovato-globose, with 5 blunt angles and ten small glands at the base.

Fig. 1. Flower. *f.* 2. Front view, and *f.* 3. back view of a stamen. *f.* 4. Calyx cut through to show the pistil and glandular disc :—*magnified.*



TAB. CXXIII.

CAPPARIS INCANESCENS.

Fruticosa, ramis diffusis valde flexuosis subdichotomis, stipulis spinosis curvatis, foliis elliptico-oblongis mucronulatis junioribus ramulisque canescentibus, corymbis multifloris umbellatis subsessilibus, pedicellis calycibusque glabris, ovario globoso acuto glabro. *W. et A.*

Capparis incanescens. *De Cand. Prodr. v. 1. p. 247. Wall. List, n. 6994. Wight, Cat. n. 106. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 26.*

C. stylosa, β. velutina. *De Cand. Prodr. v. 1. p. 246.*

HAB. Southern provinces of the Madras Peninsula. *Dr. Wight.*

Of this species, which indeed Messrs. Wight and Arnott scarcely think distinct from the *C. Roxburghii*, DC. (*C. corymbosa* Roxb. Hort. Bengh.) the flowers are small. The sepals are nearly equal, imbricated: the interior pair thin and membranaceous, the two exterior herbaceous. *Corolla* of 4 lanceolate petals, a little longer than the calyx. *Stamens* about 15. *Filaments* much curved, as long as the petals. *Anthers* ovate. *Ovary* supported on a stalk as long as the stamens. *Fruit* a small globose *Berry*, usually (by abortion) 1-seeded.

Fig. 1. Flower :—*magnified.*



Wightianæ.

N. O. Capparideæ.

TAB. CXXIV.

NIEBUHRIA LINEARIS.

Apetala, foliis trifoliolatis, foliolis ovatis oblongis linearibusve mucrone recurvato terminatis minute punctato-rugosis petiolo brevioribus, racemis terminalibus, tubo calycino campanulato, ovario fructuque ovoideis, semine solitario. *W. et A.*

Capparis linearis. *De Cand. Prodr. v. 1. p. 244. Wall. List, n. 6975. Wight, Cat. n. 100. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 23.*

C. apetala. *Roth, Nov. Sp. p. 238.*

C. linifolia. *Roxb. Hort. Beng. p. 41.*

Cratæva apetala. *Spr. Syst. Veget. v. 2. p. 448.*

HAB. Madras Peninsula. *Dr. Wight.*

For the drawing of this, and of many other Madras plants to be figured here, I am indebted to the kindness of Dr. Wight.

Fig. 1. Fruit cut through transversely to show the solitary seed.



TAB. CXXV.

PTEROSPERMUM RETICULATUM.

Foliis cuneato-oblongis 4-nerviis obliquis basi subcordatis acuminatis integerrimis vel apicem versus grosse dentatis, subtus albo-farinosi venis prominentibus reticulatis, pedunculis subtrifloris versus apices ramorum congestis petiolis longioribus, foliis involucralibus palmatifidis a flore paululum remotis caducis, petalis obovato-oblongis patentibus, filamentis sterilibus filiformibus, ovarii loculis subsexovulatis. *W. et A.*

Pterospermum reticulatum. *Wight, Cat. n. 241. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 69.*

HAB. Madras Peninsula. *Dr. Wight.*

Messrs Wight and Arnott observe of this plant that the flowers are much larger than those of *Pter. suberifolium*, Lam. and much smaller than those of *P. Heyneanum*, Wall.: two allied species.



TAB. CXXVI.

CAPPARIS BREVISPINA.

Stipulis spinosis brevibus rectiusculis, foliis brevi-petiolatis lato-lanceolatis ovalibusve magis minusve acutis mucronatis coriaceis glabris reticulatis subtus pallidioribus, pedicellis gracilibus axillaribus solitariis 1-floris folio subbrevioribus, ovario oblongo dense pubescente, bacca subglobosa lævi. *W. et A.*

Capparis brevispina. *Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 24.*

C. acuminata. *Roxb. Fl. Ind. v. 2. p. 566 (not Willd.)*

α. Foliis ovatis seu oblongo-lanceolatis. *Wight, Cat. n. 99. C. brevispina, De Cand. Prodr. v. 1. p. 248.*

β. Foliis ovalibus oblongis acutis. *Wight, Cat. n. 97. C. Rheedii. De Cand. Prodr. v. 1. p. 246. (excl. Syn. Rheedii). C. Wightiana. Wall. List. n. 6987.*

γ. Foliis rotundato-ovatis basi subcordatis. *Wight, Cat. n. 101.*

C. rotundifolia. Rottl. et Willd.—De Cand. Prodr. v. 1. p. 245.

HAB. Malabar and perhaps the Coromandel coasts. *Dr. Wight.*

The above copious list of synonyms is taken from the Flora of Messrs. Wight and Arnott, who observe that future observations may do away even with the permanency of the varieties.



Wightianæ.

N. O. Capparideæ.

TAB. CXXVII.

NIEBUHRIA OBLONGIFOLIA.

Foliis simplicibus ovali-oblongis mucronatis, calycis tubo anguste obconico, petalis æqualibus lanceolatis undulatis acutis calyce subduplo brevioribus, ovario cylindrico, fructibus nodosis inter semina constrictis. *W. et A.*

α. Foliis apice emarginatis. *Wight, Cat. n. 86, α. Wall. List, n. 6976, e. N. arenaria. De Cand. Prodr. v. 1. p. 244.*

β. Foliis retusis obtusisve. *Wight, Cat. n. 86. N. oblongifolia. De Cand. Prodr. v. 1. p. 244. Wall. List, n. 6976. c. e. C. heteroclita. Roxb. Fl. Ind. v. 2. p. 570. Cratæva oblongifolia. Spreng.*

γ. Foliis ovatis acuminatis. *Wight, Cat. n. 85. Wall. List, n. 6976. α.*

HAB. *α.* From about Courtallum. *γ.* From Cuddalore, Madras Peninsula. *Dr. Wight.*

The leaves differ extremely on the same individual; so that it is scarcely possible to limit the variations. *W. and A.*



Wightianæ.

N. O. Capparideæ.

TAB. CXXVIII.

CAPPARIS PEDUNCULOSA.

Stipulis spinosis falcatis, foliis subrotundo-ovatis obtusis basi cordatis, brevissime petiolatis glabris, umbellis sessilibus terminalibus sæpe in ramis brevibus axillaribus pauci-(-2—3)-floris, pedicellis calycibusque glabris, ovario globoso acuto glabro, fructu globoso polyspermo. *W. et A.*

Capparis pedunculosa. *Wall. List, n. 6999. Wight, Cat. n. 89.*

Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 27.

HAB. Near Point Calamere in Tanjore. *Dr. Wight.*

Fig. 1. Fruit cut through transversely :—*magnified.*



TAB. CXXIX.

GUAREA? *MICROPHYLLA.*

Foliolis 4—5 jugis ellipticis integerrimis subtus præcipue ramulisque pubescentibus, racemis axillaribus paucifloris, calyce hirsuto 4-partito, staminum tubo 8-dentato, antheris longe aristatis, toro obsoleto.

HAB. Prov. of Chacapoyas, Peru. *Mathews* (n. 2128) 1836.

Without fruit I cannot possibly refer this to any of Adrien de Jussieu's Genera of *Meliaceæ*, an order, I believe, extremely limited, as to number, in Western South America, but to which, rather than to *Cedreleæ*, I think it certainly belongs. I have therefore only referred it provisionally to the Genus *Guarea*. The anthers are sessile on the staminal tube and interior, alternating with the blunt teeth and terminated by a long flaccid awn, which appears to be incurved for its upper half.

Although my own specimen bears the number 2128, I have reason to believe, that no number was attached to the specimens sent to other subscribers. It came in the collection of 1836.

Fig. 1. Flower, unexpanded. *f.* 2. Open flower. *f.* 3. Staminal tube. *f.* 4. Upper part of the staminal tube laid open, bringing the aristate anthers more distinctly into view. *f.* 5. Back view of an anther:—*magnified.*



Mathewsianæ.

N. O. Phytolacceæ.

TAB. CXXX.

RIVINA INÆQUALIS.

Herbacea, foliis ovatis, racemis longissimis, sepalo exteriori longiore.

HAB. Tarapoto. *Mathews*, (n. 1604).

A herbaceous *plant*, with alternate petiolated leaves; the petiole slightly downy. *Racemes* 4—6 inches long, erect, bearing numerous small *flowers*, which, as well as the fructified racemes, turn black in drying. *Sepals* 5, elliptical, concave, spreading, glabrous, the outer one longer than the rest, in fruit still longer, when all the sepals become erect round the globose somewhat dry berry. *Seed* solitary, erect.

Fig. 1. Flower. *f.* 2. Fruit. *f.* 3. Included in the persistent Calyx. *f.* 4. Fruit laid open to show the seed :—*magnified*.



TAB. CXXXI.

VACCINIUM EMIRNENSE.

Foliis sempervirentibus lato-ellipticis subcoriaceis serratis venosis glaberrimis, racemis terminalibus axillaribusque, pedicellis hibracteatis (tertia ad basin pedicelli) bracteis cordatis serratis, corolla subrotata 5-partita, laciniis oblongis, antheris longe tubulosis exsertis muticis, filamentis dilatatis intus marginibusque puberulis.

HAB. Wooded mountains in the province of Madagascar.
Professor Bojer.

Apparently a low, much branching shrub, with elliptical, almost coriaceous, leaves, and copious terminal and axillary racemes. The *ovary* is entirely inferior, with a 5-lobed short limb to the calyx. The *corolla* with a very short tube and 5 oblong spreading segments. *Stamens* much exserted, awnless. *Style* swollen below the middle, arising from a depressed disc on the top of the ovary.

Fig. 1. 2. Flowers. *f.* 3. Pistil and calyx. *f.* 4. 5. Stamens :
—*magnified.*



TAB. CXXXII.

AMIROLA NITIDA.

Foliis ovatis serratis simplicibus ternatisque eglandulosis, utrinque glabris, costa superne petiolisque dilatatis puberulis.

Amirola nitida. *Pers. Syn. Pl. v. 2. p. 565. De Cand. Prodr. v. 1. p. 616.*

Lagunoa nitida. *Ruiz et Pavon, Fl. Peruv. Prodr. p. 252. Gen. Fl. Per. et Chil. p. 126. t. 28.*

β. Foliis omnibus simplicibus. (Tab. Nostr. CXXXII.)

HAB. Peru; and woods of Muna, and rocky places in the provinces of Canta and Caxatambo. *Ruiz et Pavon. Province of Chacapoyas. Mathews, 1836.*

Ruiz and Pavon describe their original plant as having leaves both simple and ternate; ours, which from the locality and other circumstances I am disposed to consider the same, has only simple leaves. Humboldt and Kunth, having detected in New Grenada two other supposed species having all simple leaves, doubted the correctness of Ruiz and Pavon in ascribing ternate leaves; but since another, a Chilian species, has decidedly ternate leaves, there is every reason to put confidence in the statements of the Spanish botanists: and I have hence made Mr. Mathews' plant here figured a *var.* I am even disposed to look upon Humboldt and Kunth's 2 species as not really distinct from ours; they were found at Loxa, at no very remote distance from the provinces above-mentioned, and the difference depending upon scarcely any other character than the greater or less degree of pubescence of the leaves. Indeed those learned authors themselves say of their *A. pinnifolia*, "an *A. nitida* diversa?" and of their following species *A. mollis*, "præcedenti simillima."

The species derives the name of *nitida* from the circumstance of the natives making rosaries of the black glossy seeds. The dilatation of the petiole is scarcely seen in the dry state, when the sides turn up, presenting a grooved front.

Fig. 1. Back of a flower. *f.* 2. Front view of a male flower. *f.* 3. do. of a female flower. *f.* 3. Pistil. *f.* 4. Capsule: *nat. size.* *f.* 5. Capsule burst open showing the 3 seeds:—all but *f.* 4. *magnified.*



TAB. CXXXIII.

POTHOS REMOTIFLORUS.

Caule scandente gracili flexuoso ramoso, foliis lato-lanceolatis acuminatissimis trinerviis, petioli vagina elongata canaliculata, spadice gracili elongato flexuoso pedunculato, spatha lineari-oblonga acuta spadice brevior, floribus remotis, perianthio 6-lobo hexandro.

HAB. Ceylon. *Mrs. Col. Walker.*

The learned Austrian Botanists Schott and Endlicher in their revision of the *Balanophoreæ* (Meletemata Botanica) attribute 4 stamens only to *Pothos*. Here there are 6, opposite to the segments of the perianth, if it may be so called, which seems made up of the rachis itself, forming a 6-lobed cup in which the stamens and pistil are situated. The *Pothos tenera*, Wall. Cat. n. 4439, from Penang, is nearly allied to this, but it has a straighter stem and spadix with closely placed flowers, more rigid leaves and a very different petiole.



Bojerianæ.

N. O. *Vaccinieæ.*

TAB. CXXXIV.

VACCINIUM SECUNDIFLORUM.

Foliis (parvis) sempervirentibus ovali-oblongis coriaceis serratis acutis glaberrimis subtus præcipue venosis, racemis terminalibus lateralibusque secundifloris pedicellis bibracteatis (tertia ad basin pedicelli) bracteis cordatis integerrimis obtusis, corolla campanulata 5-fida, antheris longe tubulosis exsertis, filamentis dilatatis intus marginibusque puberulis.

HAB. Madagascar. *Professor Bojer.*

A species allied to our *V. Emirnense* (tab. 131.) yet very distinct. The leaves are much smaller, more coriaceous, narrower and more acute, frequently tipped at the serratures with a conspicuous white gland: and the flowers are secund with a longer tube to the corolla.

Fig. 1. Flower. *f.* 2. Back view of a stamen. *f.* 3. Front view of do. (where the pubescence is omitted on the filament):
—*magnified.*



TAB. CXXXV.

GYMNOSTOMUM SETIFOLIUM. *Hook. et Arn.*

Densissime cæspitosum elongatum ramosum, foliis subulato-setaceis serrulatis, nervo crasso excurrente, seta ob innovationes sæpe laterali superne inflexo-curvato, capsula globosa lævi, operculo minuto conico depresso.

HAB. Huamantantga, Peru. *Mathews, n. 586.*

Planta densissime cæspitosa, radiculosa, superne ramosa, viridis.

Folia erecta, numerosa, imbricata, stricta, subulato-setacea, suprema longissima, denticulata, nervo crasso longe excurrente : *perichætialia* reliquis similia. *Seta* terminalis, vel ob innovationes lateralis, foliis subimmersa, apicem versus insigniter inflexa, lævis. *Capsula* globosa, ore subcontracto paululum elevato. *Operculum* parvum, breviter conicum. *Peristomium* nullum.

This plant has the habit of *Conostomum* and of *Bartramia ithyphylla*. and *B. stricta* : but if generic characters are to be rigidly derived from the peristome these four must belong to as many different genera. *Bartramia ithyphylla* has a double peristome, each of a remarkable structure : *B. stricta*, as far as our investigations have gone, possesses a single one, and that interior : *Conostomum* has only the exterior, and the present *Gymnostomum*, as we at present consider it, (together with a few others belonging to Brown's Genus *Glyphocarpa*,) is destitute of both. The same peculiarities we have elsewhere noticed in certain mosses with the habit of *Bryum cæspititium*.

Fig. 1. Tuft, *nat. size.* *f.* 2. Portion of a plant. *f.* 3. 4. Leaves. *f.* 5. Perichætium and leaf. *f.* 6. Capsule with its operculum. *f.* 7. Mouth of the Capsule :—*magnified.*



TAB. CXXXVI.

WEISSIA CAMPYLOCARPA. *Arn. et Hook.*

Caule brevissimo innovationibus elongato inferne nudiusculo, foliis imbricatis ovato-lanceolatis acuminatis laxè reticulatis subserratis, nervo distincto ad apicem attingente, seta elongata apice inflexa, capsula cernua sursum curvata cylindræa, operculo conico.

HAB. Surrucucho, Peru. *Prof. W. Jameson.*

Caules fructiferi perbreves superne foliosi: innovationes copiosæ, elongatæ. *Folia* arcte imbricata, erecta, ovato-lanceolata, laxè reticulata, obscure serrata, acuminata, nervo attingente percurta. *Seta* uncialis et ultra, erecta, superne valde inflexa. *Capsula* majuscula, cylindræa, cernua atque sursum curvata, pallide rufo-fusca, lævis. *Operculum* parvum, conicum. *Peristomium* e ciliis 16, æquidistantibus, remotis, gracillimis, albidis, obscure articulatis, basi membrana interna, ut videtur, connexis.

This moss has much the habit of a *Bryum*, with the capsule resembling some *Leptostoma*, yet having 16, entire, equidistant ciliæ. Thus we are led to refer it to *Weissia*, as that Genus now stands, from which it will no doubt be eventually separated, when we come to be better acquainted with the laws which ought to affect the arrangement of the genera of mosses. The sack within the capsule, together with its stalk and apophysis are distinctly seen, in the scarcely ripe state, through the somewhat pellucid outercoat.

Fig. 1. Tuft: *nat. size.* *f.* 2. Plant magnified. *f.* 3. Perichaetial leaf. *f.* 4. Cauline do. *f.* 5. Capsule. *f.* 6. Portion of the peristome.



TAB. CXXXVII.

HAMADRYAS ANDICOLA.

Sericea, acaulis foliis rhombeo-ovatis integris integerrimis junioribus petalis calycibusque subtus basique petioli sericeo-villosissimis.

HAB. Lofty and very cold situations upon the Cordillera of Andimarca, Peru. *Mathews*, (n. 1139).

I think there can be no doubt of this being a genuine *Hamadryas*, judging from the figure of *H. Magellanica* in De Lessert's Icones, and from a specimen in our Herbarium collected by Mr. Darwin: but my specimens of the present species are not sufficiently copious to allow of my examining so minutely as I could wish, the structure of the flowers, nor do they possess any fruit, which is still a desideratum among Botanists. It differs essentially from the species just mentioned as well as from *H. tomentosa*, not only in the entire leaves, but also in the absence of a stem. The centre of our little plant from which the flower rises, is clothed with very long beautifully silky hairs.



TAB. CXXXVIII.

COCCINIA INDICA.

Coccinia Indica. *Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 347.*

α. Foliis integris 5-angulatis, breviterve 5-lobis. *Wight, Cat. n. 1123.*

Bryonia grandis. *Linn. Mant. p. 126. De Cand. Prodr. v. 3. p. 305. Spr. Syst. Veget. v. 3. p. 15. Wall. Cat. n. 6700.*

Bryonia. *n. 356. Linn. Fl. Zeyl. p.*

Momordica monadelpha. *Roxb. Fl. Ind. v. 3. p. 708.*

Cucurbita dioica. *Roxb. Ic. E. C. Mus. t. 213.*

Rheed. Mal. v. 8. f. 14. Burm. Zeyl. t. 19. f. 1. 2. Rumph. Amb. v. 5. t. 166. f. 1.

β. Foliis profunde 5-fido-palmatis, segmentis oblongis sinuato-lobatis. *Wight, Cat. n. 1124.*

Bryonia palmata. *Linn.? De Cand.? l. c. p. 308. Spr.? Syst. Veget. v. 3. p. 17. Wall. Cat. n. 6711. a. b. c.*

HAB. Found in almost every hedge about Madras. *Dr. Wight.*

The authors of this Genus, Messrs. Wight and Arnott, observe in their work above quoted, that it is allied to *Cucurbita* in its campanulate and 5-cleft corolla;—to *Lechium* in the monadelphous stamens;—to *Momordica* in its seeds and in the tendency of the fruit to split;—and to *Bryonia* in the highly coloured fruit and its slightly baccate nature. Both from *Momordica* and *Bryonia* it is easily recognised by the corolla, the staminal crown, and several other characters.

Fig. 1. Flower with the corolla laid open:—nat. size.



Mathewsianæ.

N. O. Illicineæ.

TAB. CXXXIX.

ILEX MICROPHYLLA.

Foliis parvis rotundato-ovatis coriaceis serratis glabris brevissime petiolatis, pedunculis brevissimis axillaribus solitariis unifloris calycibusque puberulis, corolla 4-loba, stigmate depresso-capitato, drupa 4-pyrena.

HAB. Province of Chacapoyas, Peru. *Mathews*, 1836.

Apparently a low rigid shrub, with wrinkled bark, copious branches and numerous very small leaves, some almost entirely orbicular, others approaching to ovate, obtuse, serrated but not very distinctly, coriaceous, rather concave, glossy, with an indistinct costa on the upper surface; beneath convex, paler, with a slightly prominent midrib. The extremities of the branches, as well as the short flower-stalks and 4-lobed calyx, are slightly downy.

Fig. 1. Flower. *f.* 2. Corolla laid open. *f.* 3. Pistil. *f.* 4. Drupe. *f.* 5. The same cut open. *f.* 6. Leaf:—*magnified.*



TAB. CXL.

CLAVIJA SPATHULATA.

Foliis sublonge petiolatis obovato-lanceolatis coriaceo-membranaceis integerrimis, racemis glabris petiolo longioribus erectis.

Clavija spathulata. Ruiz et Pav. *Syst. Veget. Fl. Per.* p. 285.
Don, in James. *Journ.* 1831. p. 235.

HAB. Peru. Woods of Puzuzo and Muna, Peru. Ruiz et Pavon.—Mathews, (n. 1600; the station omitted).

The genus *Clavija* of Ruiz and Pavon, together with *Theophrasta*, constitute a distinct order, *Theophrasteæ* according to Mr. Don, in the Gen. System of Horticulture and Botany. In Professor Lindley's valuable work, the "Natural System of Botany," they form a small group of *Myrsineæ*. The present species, if we were to judge from the size of the leaves, (which are a foot and more in length,) forms a large shrub with small inconspicuous flowers, arranged in racemes. The calyx is 5-lobed, the lobes rounded, minutely ciliated, imbricated in bud, like the lobes of the corolla. The latter has 5 rounded scales at the mouth, and, alternating with them, at the base of each lobe of the limb, is a concave gland, opposite to the stamens. Filaments short, dilated at the base: Anther roundish, reversed, and fixed to the filament by a gland at the top of the back. *Germen* ovate, 1-celled with a central placenta: *style* short: *Stigma* capitate.

Fig. 1. Flower (scarcely expanded). f. 2. Corolla laid open. f. 3. Lobe of the corolla with the gland at its base. f. 4. Front view of a stamen. f. 5. Pistil. f. 6. Section of do.:—*magnified*.



TAB. CXLI.

BAUHINIA RACEMOSA.

Inermis arborea, foliis cordato-rotundatis bilobis, racemis elongatis, calyce spathaceo demum reflexo pubescenti-hirsuto, petalis linearibus, staminibus 10 fertilibus undique hirsutis, stylo nullo, stigmate plano, leguminibus linearibus crassis.

Bauhinea racemosa. *Lam. Encycl. Meth. v. 1. p. 390* (non *Vahl*) *Wight, Cat. n. 626, 627. Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 295.*

B. parviflora. *Vahl. Symb. v. 3. p. 55. De Cand. Prodr. v. 2. p. 514. Roxb. Fl. Ind. v. 2. p. 323.*

B. spicata. *Koen.-Roxb. in E. I. C. Mus. t. 153. Wall. Cat. n. 5789.*

Messrs. Wight and Arnott have restored the name originally given by Lamarck to this plant, but which was afterwards applied by Vahl, De Candolle and others, to a very different species.

Fig. 1. Stamen. *f.* 2. Calyx and pistil :—*magnified.*



TAB. CXLII.

BRACHYRIS RAMOSISSIMA.

Annua glabra valde paniculatim racemosa, ramulis gracilibus angulatis, foliis alternis filiformi-setaceis, capitulis solitariis, involucro obovato glutinoso, acheniis extus hirsutis, pappo *radii* corona brevissima fimbriata, *disci* e paleis 5 lineari-subspathulatis corollam subæquantibus basi in tubum brevem unitis.

HAB. Texas. II. (n. 155.) *Drummond.*

An annual very much branched plant, the stem and principal branches rounded, the ramuli angled. Flowers numerous, deep fulvous yellow. Ray of 6—8 florets, of which the pappus is very short and imperfect; that of the disk on the contrary is formed of 5 linear scales, broader upwards, nearly as long as the corolla and united below into a short tube.

Fig. 1. Flower. *f.* 2. Floret of the ray. *f.* 3. Achenium of do. *f.* 4. Floret of the disk. *f.* 5. Corolla of the disk laid open. *f.* 6. Apex of the style and stigma. *f.* 7. Pappus of the discal floret:—*magnified.*



Wightianæ.

N. O. Sterculiaceæ.

TAB. CXLIII.

STERCULIA COLORATA.

Foliis glabris palmato-5-lobis lobis acuminatis, calyce cylindraceo-clavato, carpellis oblongis membranaceis. *W. et A.*

Sterculia colorata. *Roxb. Corom. v. 1. t. 25. De Cand. Prodr. v. 1. p. 483. Spreng. Syst. Veget. v. 3. p. 83. Wall. List, n. 1119. Wight, Cat. n. 228. Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 63.*

HAB. Mountainous parts of the Rajahmundry Circar. *Dr. Roxburgh. Courtallum. Dr. Wight.*

This must be an extremely handsome plant from the rich scarlet colour of the entire panicles of flowers, and the rose-colour of the fruit, according to Dr. Roxburgh; who further observes that *S. colorata* forms a very large tree, which casts its leaves during the cold season and flowers in April, soon after which the foliage again makes its appearance.

Fig. 1. Flower laid open :—*magnified.*



Wightianæ.

N. O. Leguminosæ.

TAB. CXLIV.

SHUTERIA GLABRATA.

Foliolis utrinque glabris margine ciliatis obtusis obsolete mucronatis lateralibus ovalibus, bracteis unifloris, calyce glabro vel parce piloso. *W. et A.*

Shuteria glabrata. *Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 207.*

HAB. Cunnawady. *Dr. Wight.*

It will be at once seen that this plant belongs to a groupe of *Leguminosæ* whose generic characters are very obscurely defined. The present Genus of the learned authors of the above mentioned work, seems to be founded on the *Glycine vestita* of Graham in *Wall. List, n. 5512*, and is so closely allied to their next Genus *Notonia* that “they were only satisfied of their being distinct by the aid of the microscope:” the inflorescence, however, and the nervation of the leaflets they find to be altogether distinct in the two genera: still they have candidly expressed an opinion that they may be censured for creating these on apparently too slight grounds.

Fig. 1. Flower :—*magnified.*



TAB. CXLV.

GYMNOPSIS UNISERIALIS.

Caule erecto scabro subdichotomo ramoso, foliis oblongo-ovatis petiolatis angulato-dentatis supra nudiusculis obsolete punctatis subtus strigoso-pilosis, involucri squamis uniseriatis oblongo-spathulatis hirsutis, receptaculi paleis achænia glaberrima nitida volventibus demum tuberculatis scabris tubulosis, pappo coroniformi fimbriato.

HAB. Texas. II. (n. 135, bis). *Drummond.*

This has decidedly the scales of the involucre in a single series; in other respects it agrees with the *Aldama dentata* of Lessing, *Gymnopsis Schiedeana*, DC. (and Llav. et Lex?) The leaves are minutely dotted and nearly naked above, beneath densely clothed with close-pressed hairs. Florets of the ray neuter: of the disk perfect; the corolla with 5 long laciniae; branches of the style elongated. The palea of the receptacle completely envelopes the lower part of the floret and is even on the surface, afterwards it becomes tuberculated and the edges seem to combine so as to form a tube, firmly including the very glossy black achenium, with its short crown-like pappus.

Fig. 1. Floret of the ray. *f.* 2. Do. of the disk with its palea. *f.* 3. The palea in a more advanced state, including the achenium. *f.* 4. Achenium. *f.* 5. Pappus:—*magnified.*



TAB. CXLVI.

HYMENOXYS? LINEARIFOLIA.

Herbacea valde ramosa sub lente pilosa, foliis alternis linearibus integris integerrimis, pedunculis terminalibus unifloris, capitulo radiato, involucris squamis oblongis hirsutis, pappi paleis 5—6 ovato-acuminatis nervo excurrente longe cuspidatis.

HAB. San Felipe, Texas. III. n. 224. *Drummond.*

I refer this plant to *Hymenoxys* with some degree of doubt, arising chiefly from its undivided leaves. The flowers and fruit and pappus seem entirely to belong to that Genus, and the powerful odour of Chamomile exhaled, when the capitula are bruised, is also characteristic of *Hymenoxys*. The specimens are a span or more high, much branched, herbaceous; the leaves about an inch long. The peduncles are quite naked, terminating every branch and bearing a solitary yellow flower.

Fig. 1. Floret of the ray. *f.* 2. Do. of the disk. *f.* 3. Achenium of the same. *f.* 4. Palea of the pappus. *f.* 5. Scale of the involucre. *f.* 6. Apex of the style with the stigma :—*magnified.*



TAB. CXLVII.

BRACHYRIS MICROCEPHALA.

Fruticosa paniculato-ramosissima, ramulis herbaceis angulatis strictis gracilibus, foliis alternis linearibus, capitulis solitariis, involucre obovato glutinoso, acheniis glabris, pappo radii nullo, disci e paleis 5—7 brevissimis dentiformibus.

Brachyris microcephala. *De Cand. Prodr. v. 5. p. 313.*

B. parviflora. *Hook. in Herb. Drum.*

HAB. Sullico, Mexico. *Berlandier.* San Felipe, Texas. III. n. 228. *Drummond.*

De Candolle's character, though differently worded from the one above given, seems intended to characterize the same plant as is here represented, and in both cases the small size of the flowers or capitula has suggested the specific name. The main stem and base of the larger branches are decidedly woody, the lesser branches dark green and angled, singularly slender, almost virgate and fastigiate. Radial florets 5—7.

Fig. 1. Flower. *f.* 2. Scale of the involucre. *f.* 3. Radial floret. *f.* 4. Achenium of the same. *f.* 5. Floret of the disk. *f.* 6. Upper part of the style and stigma. *f.* 7. Achenium of the disk.



TAB. CXLVIII.

PALAFOXIA TEXANA.

Caule herbaceo, ramis petiolis pedunculis involucrisque glandulosis, foliis lineari-lanceolatis integerrimis trinerviis scabris, capitulis corymbosis radiatis multiflosculis, involucris squamis 10—12; *radii* corollis profunde trifidis, pappi paleis brevissimis obtusissimis; *disci* pappi paleis lanceolatis acuminatis uninerviis achenium tetragonum scabrum æquantibus.

HAB. Texas (*Berlandier*). II. n. 136. *Drummond*.

This seems to be a tall growing plant, the leaves turning black in drying. Flowers large, handsome, distinctly rayed, of which circumstance De Candolle takes no notice: but in other respects his description is so accurate, that I cannot but think the two plants are the same. The pappus of the disk is very large and conspicuous, with a strong midrib from which there branch off numerous delicate oblique veins, the margin is finely ciliated.

Fig. 1. Outer or radial floret, with a scale of the involucre. *f.* 2. Palea of the pappus. *f.* 3. Floret of the disk. *f.* 4. Achenium of do. *f.* 5. Palea of do:—*magnified*.



TAB. CL.

AIRA ANTARCTICA.

Cæspitosa nana, culmis procumbentibus, foliis subulatis longe vaginantibus paniculas subsessiles æquantibus, spiculis bifloris, glumis lineari-lanceolatis subæqualibus carinatis apice scabris, paleis inferioribus profunde bifidis bicuspidatis subcarinatis infra medium longe aristatis basi pilosis, interioribus planiusculis biplicatis apice bifidis squamulis 2 integris, stigmatibus parce plumosis.

HAB. New South Shetland. *Dr. Eights.*

New South Shetland has been described by voyagers as a region which, though yielding a few Lichens upon the hard rocks, yet is utterly destitute of phænogamic or flowering plants. Dr. Eights however collected in that desolate country specimens of the grass which is here figured; and probably other kinds may yet reward the researches of the Botanist who shall have the courage to visit those remote islands. *Aira antarctica* agrees in several particulars with our well-known *A. caryophyllea*; but the habit of the two is totally different no less than the colour, in ours throughout of a yellow green, particularly the paleæ, not exhibiting the greyish tint and dry and scariose appearance of the former. The glumes too in our plant are much longer, (twice or thrice as long,) narrowed at the base, and the awns are by no means so much exserted.

Fig. 1. Spikelet. *f.* 2. The florets removed from the paleæ. *f.* 3. Stamens, pistil and squamulæ. *f.* 4. Paleæ:—*magnified.*



TAB. CXLIX. *see preceding f.*

ILEX CRASSIFOLIA.

Glaberrima, foliis subrotundo-ellipticis obtusis serratis transversim venosis subtus pallidis punctatis, pedunculis axillaribus solitariis capitato-trifloris, capitulis calycibusque bibracteatis, corolla 5-lobo.

HAB. Province of Chacapoyas. *Mathews*, 1836.

In many respects this species agrees with the *I. rupicola* of Humboldt and Kunth, an inhabitant of the neighbourhood of Loxa in the province of Quito; but that is described as having smaller reticulated leaves (12—14 lines long) and 4 instead of 5 divisions to the floral coverings. Even for a Holly the present has singularly thick foliage, but less rigid and far less glossy than in our *I. Aquifolium*: it would appear as if, when recent, the leaves were more fleshy than coriaceous. Beneath they are pale and sprinkled with rusty coloured dots.

Fig. 1. Flower. *f.* 2. Corolla laid open. *f.* 3. Stamen. *f.* 4. Calyx and pistil:—*magnified.*



TAB. CLI.

LINDERNIA CAPENSIS.

Perennis, ramis erectis, foliis ovato-lanceolatis acutis subintegerrimis glabris, pedunculis solitariis axillaribus unifloris folio longioribus.

Lindernia Capensis. Th. Fl. Cap. ed. Schult. p. 480.

HAB. Cape of Good Hope; Kramrivier, Lurisrivier, &c. Thunberg. In spots that have been inundated during winter, near Wynberg. Hon. W. J. Harvey.

Root perennial ("annual" according to Thunberg.) Stems at first accumbent, often rooting, quadrangular, with a deep furrow down the opposite sides; branches opposite, nearly erect. Leaves glabrous, opposite, ovate, obovate or lanceolate, tapering below, mostly quite sessile, acute, entire or obscurely serrated. Peduncles longer than the leaves, deflexed in fruit. Calyx 5-partite; segments subulate, acute. Corolla white, faintly tinged with blue, and with two blue spots on the palate, ringent; upper lip erect, slightly vaulted, ovate, sharply bifid; lower one of 3 nearly equal, orbicular, spreading lobes. Stamens 2 perfect, 2 sterile: perfect attached to the centre of the tube; anthers of 2 diverging lobes: sterile adnate to the tube for nearly their whole length, free above, tubercled, furnished near the apex with a single tooth, no trace of anthers. Ovary ovate, 2-celled, having at the base a yellow waxy cup-shaped hypogynous disc. Style flat, erect, persistent: stigma bilamellate. W. H. Harvey.

The drawing was made at the Cape by Mr. Harvey, from the recent plant.

Fig. 1. Corolla. f. 2. The same laid open. f. 3. Apex of a fertile stamen. f. 4. do. of a sterile one. f. 5. Pistil. f. 6. Section of the ovary:—magnified.



TAB. CLII.

CLITORIA VIRIDIFLORA.

Volubilis glabra, foliis ternatis, foliolis ovatis mucronatis, stipellis setaceis, floribus fasciculatis, vexillo ovato retuso ealcarato, calyce campanulato 5-fido, bracteolis lanceolatis longitudinaliter striatis.

Clitoria viridiflora. Bouton, MSS. in *Herb. nostr.*

HAB. Moist and shady places on the borders of forests in Mauritius, especially in the district called "Flacq." Messrs. Bouton, Bojer.

A climbing shrubby plant, almost every-where perfectly glabrous. *Leaves* of 3 ovate petiolated *leaflets*, mucronated at the point, glaucous beneath. There are two small setaceous *stipules* between the 2 lateral leaflets and 2 others upon the petiole of the terminal cone. *Flowers* 4—6 from the axils of the leaves, glabrous, each upon a short *pedicel* which has a few scattered leaves. *Calyx* campanulate, glabrous, with 2 striated bracteas at the base. *Corolla* of an uniform dull yellowish-green colour. *Vexillum* destitute of spur, embracing with its base the 2 wings and the keel, and then suddenly bending back from near the middle, where there is an oblong reddish spot. *Wings* twisted at the apex which is pressed against the extremity of the keel. *Keel* slightly curved upwards. *Stamens* 10, diadelphous. *Legume* broadly-linear, compressed, stipitate, enclosing 8—10 *seeds*.

Fig. 1. Vexillum. *f.* 2. Flower, from which the vexillum is removed. *f.* 3. Keel. *f.* 4. One of the wings untwisted. *f.* 5. Calyx and Stamens. *f.* 6. Pistil :—*magnified*.



TAB. CLIII.

VALLARIS PERGULARIA.

Foliis ovatis obovatisque acutis glabris, caule fruticoso.

Vallaris Pergularia. *Br. Mem. Wern. Soc. v. 1. p. 52.*

Vallaris Pergularia. *Burm. Ind. p. 51.*

Emercia Pergularia. *Roem. et Sch. Syst. Veget. v. 4. p. 401.*

Pergularia glabra. *Linn. Mant. p. 53.*

HAB. Madras Peninsula. *Dr. Wight.*

Stem twining, shrubby. *Leaves* opposite, ovate or rather oval or obovate, nerved, rather acute, petiolate. *Peduncle* interpetiolar, dichotomous. *Flowers* corymbose. *Calyx* 5-partite, the segments lanceolate. *Corolla* hypocrateriform: *tube* short; *limb* of 5 cordate spreading lobes. *Filaments* short, subulate, situated near the mouth of the tube. *Anthers* exserted, sagittate, forming a cone; each with a large fleshy gland at the forking of the cells. Five glands surround the germen. *Style* filiform; *stigma* conico-ovate.

Fig. 1. Corolla laid open. *f.* 2. Stamen. *f.* 3. Calyx and pistil, with the hypogynous glands.



TAB. CLIV.

ELÆOCARPUS CORIACEUS.

Glaber, foliis brevi-petiolatis coriaceis obovatis utrinque reticulatis, racemis copiosis folia superantibus erectis, floribus pendulis, petalis apice multifido-fimbriatis, staminibus sub-20, antheris nudis, ovario triloculari.

HAB. Mountains of Ceylon, at an elevation of 6,000 feet above the level of the sea. *Col. Walker.*

This appears to be a stunted *shrub* or small *tree*, with thick rather tortuose and very woody *branches*, rough with the closely placed scars of the fallen -leaves. *Leaves* exceedingly thick, coriaceous, glossy above, opaque and a little paler beneath. *Torus* large, upon which the ovary is inserted.

Fig. 1. Flower. *f.* 2. The same, from which the calyx is removed. *f.* 3. Stamen. *f.* 4. Pistil and torus. *f.* 5. Section of the ovary :—*magnified.*



TAB. CLV.

ELÆOCARPUS PUBESCENS.

Ramis foliisque junioribus dense pubescentibus demum nudiusculis, foliis lato-ovalibus obovatisque subcoriaceis obscure serratis, racemis infra foliis e ramis vetustioribus pendentibus pubescentibus, petalis cuneatis basi utrinque filamento unico apice fimbriatis, staminibus sub-15, antheris nudis.

HAB. Mountains of Ceylon, 6,000 feet above the level of the sea. *Col. Walker (n. 134).*

This species is remarkable for the downy almost velvety nature of its young branches and foliage and racemes, and even in the older leaves the underside is frequently downy as well as the upper surface on the midrib and principal nerves.

Fig. 1. Flower. f. 2. Petal. f. 3. Torus, stamens, and pistil. f. 4. Stamen. f. 5. Pistil:—magnified.



TAB. CLVI.

MIMOSA RUBICAULIS.

Ramis petiolisque uncinato-aculeatis, foliis bipinnatis pinnis 5-jugis glandula setiformi inter omnia paria, foliolis 10—12-jugis oblongo-linearibus adpresso-pubescentibus, stipulis subulatis ad basin omnium petiolorum, stipellis petiolo adnatis, pedunculis monocephalis aggregatis in axillis foliorum (sæpe abortivorum) superiorum, floribus octandris, legumine sessili compresso-plano glabro obscure articulato, suturis rectis inermibus vel aculeatis. *W. et A.*

Mimosa rubicaulis. *Lam. Encycl. Meth. v. 1. p. 20. De Cand.*

Prodr. v. 2. p. 429. Wall. Cat. n. 5289. Wight, Cat. n. 565.

Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 268.

M. octandra. *Roxb. Cor. v. 2. p. 200. Ej. Fl. Ind. v. 2. p. 566.*

M. Rottleri. *Spreng. Syst. Veg. v. 2. p. 206.*

HAB. Madras Peninsula. *Dr. Wight*; by whom the figure here engraved was communicated.

Flowers rose-colored. *Stem* and *branches* tinged with deep purple.

Fig. 1. Single flower :—*magnified.*



TAB. CLVII.

ACROTREMA UNIFLORUM.

Foliis obovato-oblongis serratis, pedunculis calycibusque unifloris longe hirsutis.

HAB. Adam's Peak, Ceylon. *Mrs. Col. Walker* (n. 16).

Radix perennis. *Caulis* perbrevis, erectus, simplex, rarius divisus vel subproliferus. *Folia* subradicalia, 8—12, stellatim disposita, digitalia ad spithamæam oblongo-obovata, obtusa, serrata, membranacea, basi attenuata, majora petiolata, costata, nervosa, nervis parallelis fere horizontalibus: *pagina superior* intra nervos, *inferior* in costa nervisque, marginibus ubique longe pilosis. *Petoli* vaginantes, hirsuti. *Pedunculi* plurimi, axillares, uniflori, graciles, folio multo breviores. *Calyx* e foliolis 5 ovalibus hirsutis. *Corolla* 5-petala, petalis ovalibus calyce longioribus. *Stamina* 5. *Antheræ* poris duobus. *Germen* ovale; *styli* 3. *Capsula* 3-locularis. *Semina* numerosa, reniformia, punctata.

This is a very different species of *Acrotrema* from either of the two yet described, *A. costatum* Jack, from Penang, and *A. Wightianum* Wall. from Travancora; both of which have many-flowered scapes or peduncles. A fourth species has been also sent to me from Ceylon, by Mrs. Walker, which may be called—

A. lanceolatum; foliis lanceolatis acutis sinuato-dentatis oblique nervosis adultis glaberrimis, pedunculis unifloris.

HAB. Adam's Peak, Ceylon. *Mrs. Col. Walker*, (n. 15).—

This appears to have an annual root: and the plant is not more than half the size of *A. uniflorum*.

Fig. 1. Flower, scarcely expanded. *f.* 2. Expanded flower. *f.* 3. Front and *f.* 4. back view of a stamen. *f.* 5. Pistil. *f.* 6. The same cut through vertically. *f.* 7. Capsule. *f.* 8. Seed:—*magnified.*



TAB. CLVIII.

MARCHANTIA TRICHOCEPHALA.

Fronibus membranaceis opacis ex areolatis oblongis pinnatifidolobatis, pedunculis elongatis, receptaculo hemisphærico 5—6-lobo supra pilis longis erectis fuscis hirsutissimo.

HAB. Sandwich islands. *D. Douglas*, (n. 71).

This well marked species of *Marchantia* is one of the comparatively few species of plants, discovered by Mr. Douglas in the Sandwich islands, which have reached this country. Its fronds form widely spreading patches which are imbricating, dark-green, opaque, membranaceous, lobed in a pinnatifid manner, the lobes oblong, obtuse, sinuato-pinnatifid, the texture is very compact, almost like that of *Jungermannia epiphylla*, and no reticulations are visible to the naked eye. *Peduncles* at or near the apex of the segments of the frond, at first short and hairy, at length an inch or an inch and a half long, naked, terminated by an hemisphærical involucre, clothed above with copious long erect hairs, the margin about 5-lobed, and bearing beneath as many pendent capsules, filled with seeds and spiral filaments.

Fig. 1. Portion of the fertile frond. *f.* 2. Receptacle with capsules. *f.* 3. Spiral filaments. *f.* 4. Seeds or sporules :—*magnified.*



TAB. CLIX.

ACACIA SERTIFORMIS, A. C.

Glaberrima glauca, phyllodiis sessilibus subrotundis obliquis coriaceis marginatis mucronatis spinosis basi superne glandulosis, pedunculis axillaribus solitariis vel binis monocephalis folio longioribus, capitulis globosis.

Acacia sertiformis. *All. Cunn. in Herb. nostr.*

HAB. Western skirts of Liverpool plains; N. S. Wales. *Allan Cunningham, Esq.*

Mr. Cunningham notices this as a lovely *shrub*, forming beautiful garlands with its bending many-flowered *branches*. It is extremely difficult to describe the form of foliage in the numerous species of New Holland *Acaciæ* which have oblique or inæquilateral leaves. In the present species, were the two halves of the phyllodium equally large, the shape would be cordate, but besides that the one half is much smaller than the other, this lesser one is suddenly contracted above the middle, and thence to the apex presents little more than the thickened margin running parallel with the costa. There is a small subulate stipule on each side the base of the phyllodium. The heads of flowers are numerous in the axils towards the extremity of the branches, handsome and yellow.

Fig. 1. Phyllodium :—*magnified.*



TAB. CLX.

ACACIA TRANSLUCENS, *A. C.*

Glabra subglaucâ, ramis virgatis angulatis, phyllodiis sessilibus dimidiato-ovatis obliquis falcatis parallelo-nervosis marginatis hinc basi obsolete glandulosis junioribus apice latioribus discoloribus incrassatis pellucidis, pedunculis solitariis monocephalis folio longioribus.

Acacia translucens. *All. Cunn. in Herb. nostr.*

HAB. Montagu Sound on the N. W. coast of N. Holland.
Allan Cunningham, Esq.

An erect, twiggy *shrub*, with very angled *branches*. *Phyllodia* scarcely an inch long, oblique and falcate, marked with parallel nerves and with an indistinct small gland on the base of the upper margin: the young ones are singularly dilated at the apex and these apices are swollen, pellucid, and appear as if, in the living state, they were filled with gummy or resinous fluid; in age this singular character disappears and the phyllodium becomes narrow and more acute at the apex, but seldom mucronated. *Stipules* 2, small, ovate, acute, appressed. *Peduncles* about twice as long as the leaves, solitary, bearing a globose head of flowers.

Fig. 1. Young phyllodium. *f.* 2. Old phyllodium:—*magnified.*



Cunninghamianæ.

N. O. Leguminosæ.

TAB. CLXI.

ACACIA HISPIDULA, A. C.

Tota pubescenti-scabra, ramis teretibus, phyllodiis oblongis falcatis coriaceis subobliquis marginatis mucronatis marginibus costisque spinulosis, pedunculis axillaribus subsolitariis monocephalis folio brevioribus.

Acacia hispidula. *All. Cunn. in Herb. nostr.*

HAB. New Holland. *Allan Cunningham, Esq.*, but the particular locality is not marked on the only specimen I have seen.

A very harsh and stiff-looking *shrub*, with rigid *phyllodia*, which, as well as the *stem* and *branches*, are rough with short bristles, while the thickened margins of the *phyllodia* and the midrib are clothed with short prickles. *Heads of flowers* globose, partially concealed by the *phyllodia*, which are a little longer than the peduncles.

Fig. 1. Phyllodium :—*magnified.*



TAB. CLXII. CLXIII.

LYCOPODIUM LEPIDOPHYLLUM.

Caulibus plurimis cæspitosis bi-tri-pinnatis stellatim dispositis siccitate incurvis globum formantibus, ramis undique foliosis, foliis distichis arctissime imbricatis coriaceo-rigidis late ovatis obtusis margine scariosis basi ciliatis subtus pallidis rufescentibus, stipulis folio subsimilibus margine toto ciliatis, spicis terminalibus acute triquetris, bracteis cordato-acuminatis.

Lycopodium lepidophyllum. *Hook. et Grev. Enum. Fil. suppl. in Bot. Misc. v. 3. p. 106.*

Mexico (near San Blas.) *Capt. Henry Dundas.* I possess specimens from *Alex. Caldcleugh, Esq., Mr. Cuming, J. T. Mackay, Esq. and Dr. Forbes*:—all I believe from Mexico.

This plant, in S. America, long enjoyed such a celebrity from its remarkably hygrometric property, that specimens form an article of commerce between Mexico and Peru. Like the *Anastatica Hierochuntica*, or famous *Rose of Jericho*,—in a dried state, the stems and branches are incurved so that the whole plant forms an elastic ball:—on being moistened, the stems and branches spread out horizontally: and this experiment may be repeatedly performed. Mr. Cuming gave an equal weight in gold for the specimen, which, so far as I know, was the first perfect one ever brought to Europe, and which he kindly presented to me; but numerous and finer specimens have since been given me by Dr. Forbes of Chichester, through the Rev. G. E. Smith.

Fig. 1. Portion of a branch, underside. *f.* 2. Upperside. *f.* 3. Leaf. *f.* 4. Stipule. *f.* 5. Fertile spikes. *f.* 6. Bractea, and *f.* 7. Capsule from the same:—*magnified.*



Cumingianæ.

N. O. Lycopodiaceæ.

TAB. CLXIII.

LYCOPodium LEPIDOPHYLLUM.

This figure represents the plant in a dried state rolled up like a ball, and is one of many liberally communicated to me by Dr. Forbes of Chichester. The some gentleman has supplied the Rev. G. E. Smith with a considerable number, which has enabled him to draw up a Memoir on the structure and properties of this and of some other hygrometric plants belonging to the present Order and to the *Filices*, which I trust will soon be given to the public.



TAB. CLXIV.

ACACIA BUXIFOLIA.

Glabra, ramis virgatis, phyllodiis oblique lanceolatis obscure venosis marginatisque acutis, glandula infra medium marginis superioris sæpe obsoleta, capitulis racemosis axillaribus phyllodio duplo longioribus.

Acacia buxifolia. *All. Cunn. in Field's Austral. v. 2. p. 344. n. 50.*

HAB. Pine (*Callitris*) ranges, Macquarie River. *Allan Cunningham, Esq.*

A *shrub*; with slender twiggy *branches*, and numerous, nearly erect, lanceolate, very smooth and glabrous *phyllodia*, on which the marginal gland is sometimes conspicuous, but more generally wholly wanting. *Racemes* of 4—6 globose *capitula*, longer than the leaves, deep yellow.

Fig. 1. Phyllodium :—*magnified.*



Cunninghamianæ.

N. O. Leguminosæ.

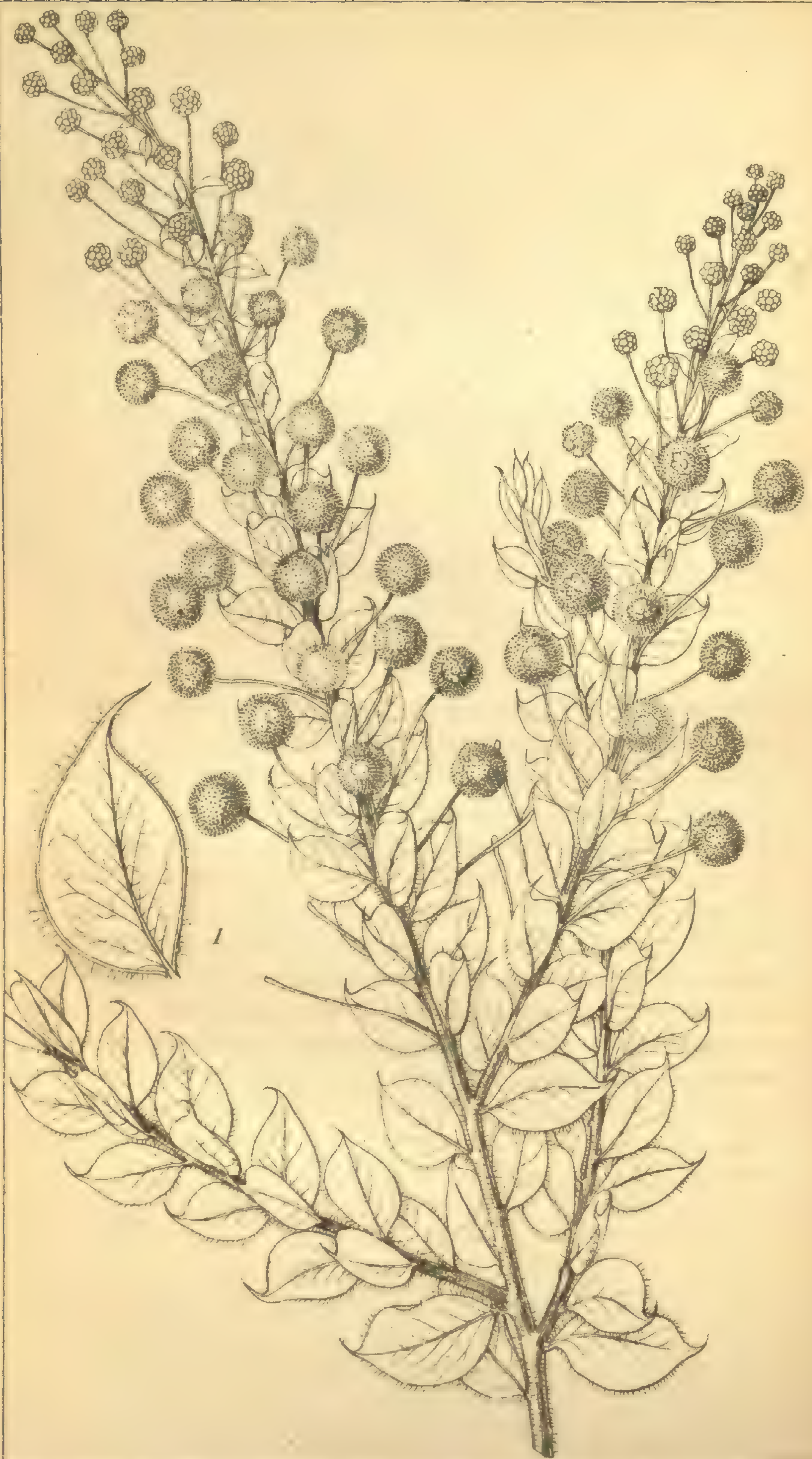
TAB. CLXV.

ACACIA CUNNINGHAMII.

Ramis acute trigonis, phyllodiis (palmaribus) late lanceolatis falcatis basi apiceque attenuatis parallelim nervosis furfuraceis basi antice uniglandulosis, spicis elongatis vermiculiformibus axillaribus sessilibus folio brevioribus, floribus 5-fidis.

HAB. Forest ground, near Brisbane river. *Allan Cunningham, Esq.*

A tree, 10-15 feet high, with very large falcated *phyllodia*, clothed, more especially in the young state and on the young branches, with a mealy substance, which in older plants is deciduous. The *spikes* are generally 2 together in the axils of the leaves, sessile, flexuose. Between the parallel nerves are lesser oblique and often anastomosing ones.



TAB. CLXVI.

ACACIA SETIGERA, A. C.

Pilosa, ramis diffusis teretibus, phyllodiis ellipticis obliquis undulato-tortuosis venosis marginatis marginis basi superiore uniglandulosis apice in mucronem elongatum subulato-setiformem acuminatis, pedunculis axillaribus monocephalis folio longioribus, (foliis superioribus sub flores sæpe abortivis).

Acacia setigera. *All. Cunn. in Herb. nostr.*

HAB. Sandstone ridges on the western branches of Hunter's river, N. Holland. *Allan Cunningham, Esq.*

The *phyllodia* and *branches* of this shrub are black in drying: the latter are quite cylindrical, pilose: the former are scarcely an inch long (even the largest of them), elliptical, oblique, coriaceous, acute at the base, acuminate at the apex into a long slender curved subulate or almost setaceous point: the margin is thickened and ciliated with long hairs: the surface has a few scattered hairs. Heads of *flowers* globose, copious, on *peduncles* twice as long as the *phyllodia*, from the axils of which they spring: these *phyllodia*, however, gradually become smaller, and altogether disappear beneath the uppermost *peduncles*, which thus form a terminal *raceme*.

Fig. 1. Phyllodium:—*magnified.*



Wightianæ.

N. O. Capparideæ.

TAB. CLXXVIII.

CRATÆVA ROXBURGHII.

Foliolis ovatis acuminatis basi attenuatis lateralibus basi inæqualibus, petalorum limbo ovato-rotundatis, staminibus numerosis (16-20 vel pluribus,) toro hæmispherico, bacca globosa. *W. et A.*
Cratæva Roxburghii. *Br. in Denh. et Clap. Trav. App.—*
Wight, Cat. n. 83, 84. Wight et Arn. Fl. Penins. Ind.
Or. v. 1. p. 23.

C. odorata. *Ham. in Linn. Trans. v. 15. p. 118.*

C. religiosa. *Ham. l. c. (non Vahl). Wall. Cat. n. 6972.*

C. Tapia. *Vahl, Symb. 3. p. 61.*

Capparis trifolia. *Roxb. Fl. Ind. v. 2. p. 571.*

HAB. Not uncommon on the coast of Coromandel. *Dr. Wight.*

Fig. 1. Section of the fruit. *f.* 2. seed. *f.* 3. seed laid open :—
slightly magnified.



Fraserianæ.

N. O. Leguminosæ.

TAB. CLXVII.

ACACIA ANCEPS.

Glaberrima, ramis ancipitibus alatis, phyllodiis elliptico-lanceolatis distichis parallelim nervosis, pedunculis axillaribus moncephalis solitariis phyllodio multoties brevioribus.

HAB. Margins of dense forests at Brisbane River, N. Holland.
Charles Fraser.

A singular and well-marked species, having the *stem* (as much as my solitary specimen exhibits of it) and *branches* singularly compressed, ancipitate and winged; the *phyllodia* inserted on the two opposite edges upon a tooth or projection, large, elliptical-lanceolate, very obtuse, sometimes with a short mucro, the nerves parallel, but united by lesser ones which anastomose. Heads of *flowers* globose, solitary, axillary, on a very short *peduncle*.



TAB. CLXVIII.

ACACIA NEUROCARPA, *A. C.*

Canescens demum glabra, phyllodiis (omnium maximis) semi-ovatis obtusis in petiolum attenuatis oblique 3—4-nerviis margine inferiori curvato, floribus spicatis, leguminibus (imperfectis ?) tortuosis.

Acacia neurocarpa. *All. Cunn. in Herb. nostr.*

HAB. Cambridge Gulf, N. Holland. *Allan Cunningham, Esq.*

I preserve the ms. name given to this plant by Mr. Cunningham, though my own specimen, in consequence of the imperfect state of its fruit, does not indicate the character from which that name is derived. It is also destitute of root and flowers: but the great size and shape of the *phyllodia* and the acutely triangular *branches*, together with the hoary appearance of all the younger parts of the plant, will readily mark this species. One of the *phyllodia* measures above 8 inches in length and between 5 and 6 in width. These large ones, it may be observed, are broader in proportion than the older ones; all of them taper into a rounded petioliform base, the apex is very blunt, having a mucro at the oblique point.



TAB. CLXIX.

ACACIA DOLABRIFORMIS, *A. C.*

Ramis obtuse angulatis superioribus floriferis non vero aphyllis, phyllodiis late semiovatis obtusis brevi-petiolatis oblique 3—5 nerviis marginatis, margine inferiori recto, spicis elongatis cylindricis axillaribus, leguminibus linearibus obtusis subteretibus, seminibus isthmis pulposis interceptis.

Acacia dolabriformis. *All. Cunn. in Herb. nostr.*

HAB. Various parts of the North coast of New Holland. *Allan Cunningham, Esq.*

Allied to the preceding species, and according to Mr. Cunningham's notes some of the *phyllodia* are nearly as large as in that plant, but they are distinguished by the lower margin forming a straight line, while the upper forms a remarkable curved one. The *spikes* seem to be truly axillary, but in the very luxuriant flowering specimens, the *phyllodia* disappear among the spikes, which thus form large *panicles* of blossoms.

Fig. 1. Legumen :—*natural size.*



TAB. CLXX.

ACACIA CULTRIFORMIS, *A. C.*

Glabra, ramis (e phyllodiis subdecurrentibus) angulatis, phyllodiis cultriformibus marginatis mucronato-acutis angulo superiori uniglandulosis costatis venosis, racemis paniculatis inferioribus axillaribus.

Acacia cultriformis. *All. Cunn. in Herb. nostr.*

HAB. Bushy forest ground, Hunter's River, New Holland.

Allan Cunningham, Esq.

An erect, twiggy, branching *shrub*, the *branches* reddish-purple, and slightly angular. *Phyllodia* numerous, about an inch long, of a shape which is perhaps best expressed by Mr. Cunningham's specific name, or in other words semi-rhomboid; the lower margin forming a straight line; the upper, two sides of a triangle, having a gland on the upper angle, the nerve running nearest to the lower margin. *Racemes* forming handsome *panicles* of *flowers*, collected into globose *capitula*: the lower racemes are however often leafy.

Fig. 1. Leaf:—*slightly magnified.*



TAB. CLXXI.

ACACIA FRASERI.

Pulverulenti-glauca albida pubescens, phyllodiis ellipticis sub-obliquis mucronatis marginatis costis marginibusque ciliatis, capitulis racemosis, racemis phyllodio 3-plo longioribus.

HAB. Banks of the River Logan, N. Holland. *Charles Fraser.*

This plant has the *phyllodia*, *stems*, and *peduncles* white with a powdery substance, which is particularly abundant on the younger parts: the whole is likewise clothed with a fine down, while the margins of the *phyllodia* and their costa are distinctly ciliated. These *phyllodia* have their sides but slightly unequal, and there is no perceptible gland on the margin.

Fig. 1. Phyllodium:—*slightly magnified.*



TAB. CLXXII.

ACACIA LYCOPODIIFOLIA, A. C.

Pubescenti-hirsuta, foliis minutis verticillatis linearibus mucronatis, stipulis setaceis, pedunculis sparsis axillaribus solitariis monocephalis glabris foliis multo longioribus, leguminibus lineari-oblongis compressissimis.

Acacia lycopodiifolia. *All. Cunn. in Herb. nostr.*

HAB. Cambridge Gulf, N. Holland. *Allan Cunningham, Esq.*

This is indeed a very remarkable species of this most extensive genus. The *leaves* (*phyllodia*?) are arranged in *verticilli* (8—10 in a whorl), each with a grooved line on the upper and underside, a pair of setaceous stipules at the base, mucronate at the point and hairy on the surface. Heads of *flowers* sparingly scattered on solitary *peduncles*, which are many times longer than the little leaves.

Fig. 1. Whorl of leaves. *f.* 2. Single leaf with its stipules :—*magnified.*



TAB. CLXXIII.

RANUNCULUS SAGITTÆFOLIUS.

Foliis radicalibus longe petiolatis (petiolis hirsutis) cordato-sagittatis obtusis crenatis cauleque erecto glabris, superioribus sensim angustioribus minus petiolatis serrato-pinnatifidis, floribus terminalibus subpaniculatis, sepalis 5 patentibus petalis triplo minoribus, rhizomate crasso elongato radicante.

HAB. Ceylon. *Mrs. Col. Walker.*

Rhizoma crassum, repens. *Caulis* erectus, spithamæus ad pedalem, teres, striatus, glaber, superne paniculatus. *Folia* pleraque radicalia, longe petiolata, cordato-sagittata, obtusa, crenata, glabra: *caulina* magis ovata, minusque petiolata: *suprema* lanceolata, subsessilia, pinnatifido-serrata. *Pedunculi* erecti, graciles. *Flos* mediocris. *Calycis sepal*a 5, subrotundata, patentia. *Petala* 5, subrotundo-obcordata, glabra, flava. *Ovaria* in capitulum subrotundum congesta. *Achenia* immatura subrotunda, compressa, stylo persistente mucronata terminata, glabra.

A smaller specimen than that here figured sent by Mrs. Walker to Dr. Graham, exhibits a creeping root or rhizoma 3 or 4 inches in length, throwing out numerous thick radicles from its underside.



TAB. CLXXIV.

NEUROCALYX ZEYLANICUS.

GEN. CHAR. *Calycis tubus* obconicus pentagonus : *limbus* 5-partitus, laciniis ovato-lanceolatis foliaceis nervosis persistentibus. *Corolla* rotata 5-partita, calycis foliolis duplo brevioribus. *Stamina* 5 : *Filamenta* 0 : *Antheræ* magnæ in tubum pyramidalem coalitæ. *Ovarium* turbinatum, disco operculari coronatum : *Stylus* discum perforans filiformis, staminibus paululum longior : *Stigma* simplex. *Capsula* 5-locularis ? *Semina* numerosa, parva.—Herba caule simplici perbrevis, radice sublignosa perenni (?). Folia lanceolata, acuminata, membranacea, penninervia, integerrima, basi longe attenuata. Stipulæ multifidæ, laciniis subulatis. Racemi axillares, folio breviores ; pedicelli bracteati.

Neurocalyx Zeylanicus.

HAB. Ceylon. Col. Walker.

Quite a new genus ; certainly allied to, but very distinct from *Argostemma* of Wallich, as Dr. Arnott has justly observed to me. The underside of the foliage is much paler than the upper.

Fig. 1. Flower. *f.* 2. Calyx and ovary. *f.* 3. Section of the immature fruit :—*magnified.*



TAB. CLXXV.

POTHOS SCANDENS.

Scandens radicans, foliis lanceolatis in petiolum latissimum articulatis, pedunculis axillaribus solitariis basi vaginatis folio brevioribus, spadice pedicellata ovali-globosa, spatha cucullata.

Pothos scandens. *Linn. Sp. Pl. p. 1347. Ker, Bot. Reg. t. 1337. Wall. Cat. n. 4435.*

Ana-Parna. *Rheed. Hort. Mal. v. 7. p. 75. t. 40.*

Appendix duplo folio. *Rumph. Amb. v. 5. t. 184. f. 2.*

HAB. Apparently frequent over a great part of India, as Chittagong, Malabar, Amboyna and other Eastern Islands. (*Roxburgh*). Ceylon. *Col. Walker.*

So unlike is this plant to the *P. scandens* figured by Mr. Ker in the Botanical Register above quoted, that I could not believe that it was the same species, until on a comparison of various individuals in my Herbarium it appeared to be liable to great variation, even on different parts of the same plant, especially in the relative length of the petioles and peduncles. The nervation of the leaves is however very incorrectly represented in the Bot. Reg.

Our figure is taken from Ceylon specimens.



TAB. CLXXVI.

ANEMONE WIGHTIANA.

(Sect. Anemonospermos.)

Sericeo-villosa, foliis longe petiolatis circumscriptione cordato-subrotundis tripartitis, segmentis profunde trifidis laciniis cuneatis crenato-lobatis, involucralibus sessilibus (1—2) plerumque trifidis segmentis oblongo-linearibus integris bi-trifidisve, sepalis ellipticis sub-7, stylis uncinatis.

Anemone Wightiana. *Wall. Cat. n. 4697. Wight, Cat. n. 9.*

11. *Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 3.*

β. *major. A. dubia. Wall. Cat. n. 4698. Wight, Cat. n. 10.*

Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 3.

HAB. α. and β. Neelgheries. *Dr. Wight. Ceylon. Col. Walker.*

My own specimens from Col. and Mrs. Walker (of which the smaller kind is here figured) as well as those from Dr. Wallich and Dr. Wight, confirm the opinion expressed in the work of Dr. Arnott, that *A. Wightiana* and *A. dubia* are merely varieties of the same species. It is a mountain plant, and so far as we at present know, confined to the Neelgherie hills and those of Ceylon; in the latter country growing at an elevation of 6000 feet above the level of the sea.



TAB. CLXXVII.

CATASETUM CRISTATUM; *var. monstrosum*.

Monacanthi et Myanthi cristati, proles biformis. *Lindl. Bot. Reg. t. 1951.*

I had, more than a year ago, expressed my opinion that *Myanthus* could not be distinguished generically from *Catasetum*, and I am happy to find that the learned author of the former genus now not only coincides in that opinion, but also unites his *Monacanthus* with it. Indeed the very plant upon which this latter genus was founded (*M. viridis*, *Bot. Reg. t. 1752*), I have long known at Wentworth Gardens, and on the first sight of it, I mentioned to Mr. Cooper my opinion that it was only a monstrosity of some *Catasetum*; nor am I sure that it is not the very species here figured, with all its flowers metamorphosed so as to resemble the original *Catasetum*, having no perfect anther and the setæ of the column obsolete. *Monacanthus discolor* (*Bot. Reg. t. 1735*), having perfect flowers and no setæ, has a better right to be distinguished from *Catasetum* than *M. viridis*. In regard to the present singular monstrosity, some information respecting it was many months back communicated to me by Dr. Schomburgk from Demerara, and the specimen was sent to Dr. Brown in London. Shortly after, my friend and former pupil, Dr. Nimmo, favoured me with the plant here figured, preserved in spirits. In the meanwhile a fine specimen flowered at Zion House, which Professor Lindley figured in the Botanical Register.



TAB. CLXXIX.

DICRANUM JAMESONI.

Caulibus elongatis cæspitosis, foliis densis erecto-patentibus secundis nitidis subulatis canaliculatis apice ad marginem carinamque serrulatis, nervo crasso latissimo, setis subaggregatis flexuosis ob innovationibus caule brevioribus, capsula oblonga inclinata sulcata basi strumosa, operculo e basi conico subulato.

HAB. Surucucho, Columbia. *Prof. W. Jameson.*

Caules digitales, superne præcipue ramosi atque proliferi. *Folia* numerosa, nitida, magis minusve flexuosa, inferne lata, planiuscula, fere lanceolata, in acumen longum angustissimum desinentia, apice solummodo serrata. *Peristomium* e dentibus 16, longiusculis, rubris, ultra medium fissis: *Calyptram* non vidi.

The drawing was made by W. Wilson, Esq.

Fig. 1. 1. Plants; *natural size*.—*f.* 2, 3. Leaves. *f.* 4. Section near the middle of a leaf. *f.* 5. Section near the base of do. *f.* 6. Apex of a leaf. *f.* 7. Capsule. *f.* 8. Operculum. *f.* 9. Two of the teeth of the peristome:—*magnified*.



TAB. CLXXX.

DOUGLASIA NIVALIS.

GEN. CHAR. *Cal.* obconicus, angulatus, 5-dentatus. *Cor.* infundibuliformis, tubo ventricosus, limbo plano 5-partito, fauce callo lineari sub utroque sinu. *Ovarium* uniloculare; *placenta* centrali libera pedicellata fungilliformi, margine 5-dentata; *ovula* 5, dentibus placentæ opposita. *Capsula* vestita, unilocularis, 5-valvis. *Semina* 2, concava, scrobiculata.—Cæspites suffruticulosi (*Americæ borealis*), foliis indivisis, floribus subumbellatis, solitariisque. *Lindl.*

Douglasia nivalis; foliis linearibus pube rigida ramosa incanis subverticillatis, floribus longe pedunculatis subumbellatis. *Lindl. in Brande's Journ.* 1828. p. 383. *Bot. Reg. t.* 1886.

HAB. On the Rocky mountains of N. America, in lat. 52° N., long. 118° W., at an estimated elevation of 12,000 feet above the level of the sea: flowering in April, while surrounded by snow. *D. Douglas.*

I was favoured with this drawing from the able pencil of Miss Drake by Dr. Lindley, and the present engraving was made from it at the time when the only account of the plant that had appeared was in Brande's Journal above quoted. Since that period a figure has appeared in the Botanical Register: but I am yet unwilling to withhold the present plate from the public, especially as it contains an analysis of the fructification.—A second species of the Genus (*D. arctica*) is in my possession, gathered by Dr. Richardson on the arctic shores of N. America.

Fig. 1. Flower. *f.* 2. Part of the corolla with the stamens and glands laid open. *f.* 3. Portion of the corolla, with a single stamen. *f.* 4. Pistil. *f.* 5. Placenta, with ovules. *f.* 6. Seed:—magnified.



TAB. CLXXXI.

CAPPARIS DIVERSIFOLIA.

Fruticosa, stipulis brevibus uncinatis, foliis linearibus acuminatis junioribus oblongo-lanceolatis acuminatis reticulatis glaberrimis, corymbis umbelliferis ad apices ramulorum vetustiorum pauci-(-2—8)-floris, pedicellis calyceque (eiusdem longitudinis) puberulis, ovario anguste oblongo glabro.

W. et A.

Capparis diversifolia. *Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 27.*

HAB. Madras Peninsula. *Dr. Wight.*

Flowers moderately large, purple rose-colour.

Fig. 1. Calyx and pistil :—*magnified.*



TAB. CLXXXII.

EUPHORBIA APHYLLA.

Fruticulosa inermis aphylla nuda articulato-prolifero-ramosa, ramis simplicibus subclavato-cylindricis lævibus glaucis, floribus terminalibus, appendiculis involucris ovalibus integerrimis, capsulis lævibus glabris. *Lowe.*

Euphorbia aphylla (*Brouss.*) *Willd. Enum. p. 501. Spreng. Syst. Veget. v. 3. p. 787.*

HAB. Canary. *Broussonet. P. B. Webb, Esq.*

The drawing here engraved was obligingly made by Miss Young in the island of Madera and communicated by the Rev. R. T. Lowe with the following remarks:—"Sent from Grand Canary (to Madera) in 1829, by my friend P. B. Webb, Esq., then actively engaged in exploring the Natural History of the Canarian Archipelago in most of its branches, and from whose discoveries and researches the highest results may be expected. He then informed me that he had only met with *E. aphylla* in a single locality in Teneriffe, though it is very common in Grand Canary. It is rarely found above the distance of a mile from the coast, and in hot dry sunny situations."



TAB. CLXXXIII.

ANTIGRAMMA REPANDA.

Antigramma repanda. Presl, in *Herb. Hook.*

Scolopendrium repandum. Raddi, *Fil. Bras. t. 57. f. 1.* Spreng.

Syst. Veget. v. 4. p. 69.

HAB. Brazil. Raddi. Sellow. Mr. Gardner.

I have long known this plant as the *Scolopendrium repandum* of Raddi; and I have lately received the same from my friend Dr. Klotzsch, marked as the *Antigramma repanda* of Presl. Whether or not the latter author has any where published it, under that name, I am ignorant:—but the Genus I gladly adopt, differing remarkably as it does from *Scolopendrium* in not having the double involucre arising from the same vein, but from two different veins or branches, often considerably remote from each other. In fact the fructification of *Scolopendrium* may be looked upon as in single lines, covered by an involucre which separates in the middle through its whole length. In *Antigramma*, the fructifications are in twin lines from different nerves, each pair opening internally with an external unilateral involucre.*

This plant grows in tufts from densely matted fibrous roots. Fronds lanceolate, shortly stipitate, membranaceo-coriaceous, somewhat waved at the margin, about a foot long.

Fig. 1. Fructifications:—*magnified.*

* While this description is in the press, I have received a copy of Presl's "*Tentamen Pteridographiæ*," where I find the Genus established at p. 120. t. 4. f. 9, 10.



TAB. CLXXXIV.

DIPLAZIUM CORDIFOLIUM.

Frondeb longestipitatis cordato-oblongis acuminatis marginatis repandis membranaceis, stipite inferne paleaceo. *Blume.*

Diplazium cordifolium. *Blume, Enum. Pl. Jav. p. 190.*

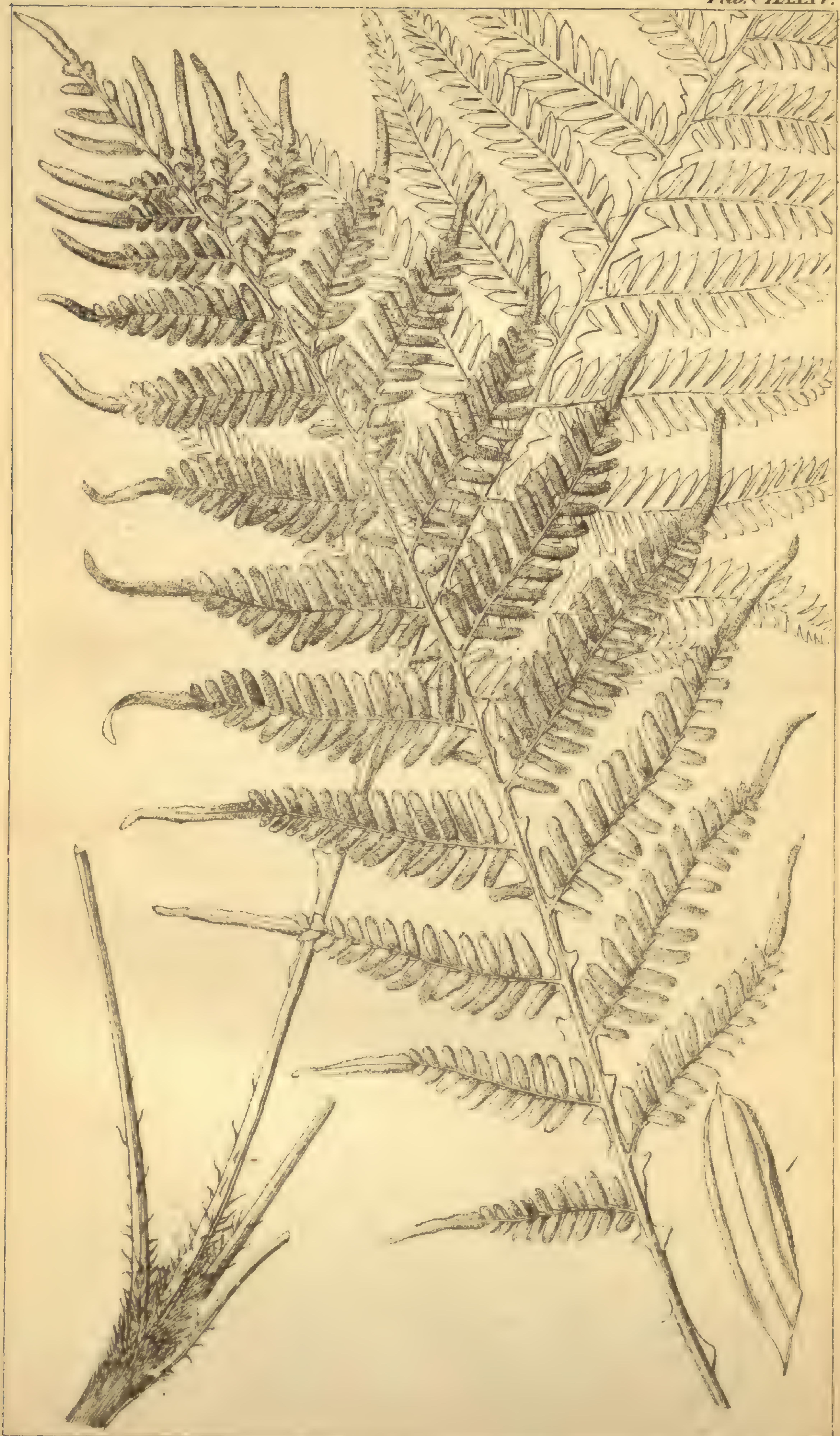
D. ovatum. *Wall. MSS. in Herb. Hook.*

HAB. At the sources of rivers in the mountains of Gede, Java.

Dr. Blume. Sylhet? *Dr. Wallich.*

I have long possessed this plant from Dr. Wallich, but no particular station was given with the specimen, nor do I find it named in the extensive “*Catalogue*” of that distinguished author. It agrees so well with the *D. cordifolium* of Blume, that I do not hesitate about retaining the above name: indeed one of my two specimens is shorter and more cordate at the base than that here given. In both, the lower part of the *stipes* is wanting: what remains is more than a foot long, smooth, but not glossy, grooved on the upper side. *Fronde* 6 to 8 inches in length, ovate or oblongo-subcordate, in one instance proliferous at the base, between membranaceous and coriaceous, slightly repand at the margin, entire, glabrous: the parallel almost transverse dichotomous veins beneath almost wholly covered with *fructifications*, having on each side a slender continuous involucre.

Fig. 1. Portion of the fructification:—*magnified.*



TAB. CLXXXV.

LOMARIA FRASERI.

Frondebis bipinnatis glabris, pinnulis lanceolatis profunde pinatifidis sessilibus basi decurrenti-coadunatis, sterilium segmentis oblongis serrato-repandis integrisve falcatis acutis, terminali elongata, fertilium lineari-oblongis integris obtusiusculis, stipite anguloso infra pinnas inæqualiter alato, basi paleaceo-squamoso, caudice scandente scabro. *All. Cunn.*

Lomaria Fraseri. *All. Cunn. in Specimen of Bot. of N. Zeal. in Hook. Comp. to Bot. Mag. v. 2. p. 364.*

HAB. Forests in the Northern Island of N. Zealand, on the East Coast. *C. Fraser*, 1825, also at Wangaroa and Hokianga, in dense forests. *R. Cunningham.* 1834.

The *fronds* themselves of this fern do not appear to attain a length of more than a foot or a foot and a half; but the *caudex* probably grows to a considerable height, as Mr. Fraser mentions specimens which he saw 20 feet in length. The fertile fronds are densely covered beneath with rich golden-brown capsules.

Fig. 1. Segment of a fertile frond, seen from above:—*magnified.*



TAB. CLXXXVI.

LYCOPODIUM JUSSIEUI.

Caule decumbente, ramis erectis dichotomis densis, ramulis elongatis, foliis distichis alternis ovatis acuminatis basi adnatis decurrentibus integerrimis, stipulis inferis biseriatis subulato-lanceolatis obtusis, pedunculis elongatis dichotomis squamosis, spicis cylindricis, bracteis cordato-acuminatis squarrosis.

Lycopodium Jussieui. Desv. *Enc. Bot. Suppl.* v. 3. p. 543.

Humb. et Bonpl. Nov. Gen. v. 1. p. 31. *Kaulf. Enum. Fil.* p.

10. *Hook. et Grev. Enum. Fil. in Bot. Misc.* v. 2. p. 379.

Peru. *Humboldt.* In the province of Chacapoyas. *Mathews*, (1836). Jamaica. *Dr. Macfadyen.*

Beautiful specimens of this *Lycopodium* are in Mr. Mathews' last collections of Peruvian plants, of which one is here figured. Dr. Macfadyen's specimens are without fructification; but the foliage and stipules leave no doubt of their identity. These stipules are close pressed and have the lower half adnate with the underside of the stem.

Fig. 1. Portion of a stem with leaves, upper side. *f.* 2. Portion of do., underside. *f.* 3. Stipule. *f.* 4, 5. Bractees with their capsules. *f.* 6. Portion of peduncle with its scales, or rather reduced leaves and stipules:—*magnified.*



TAB. CLXXXVII.

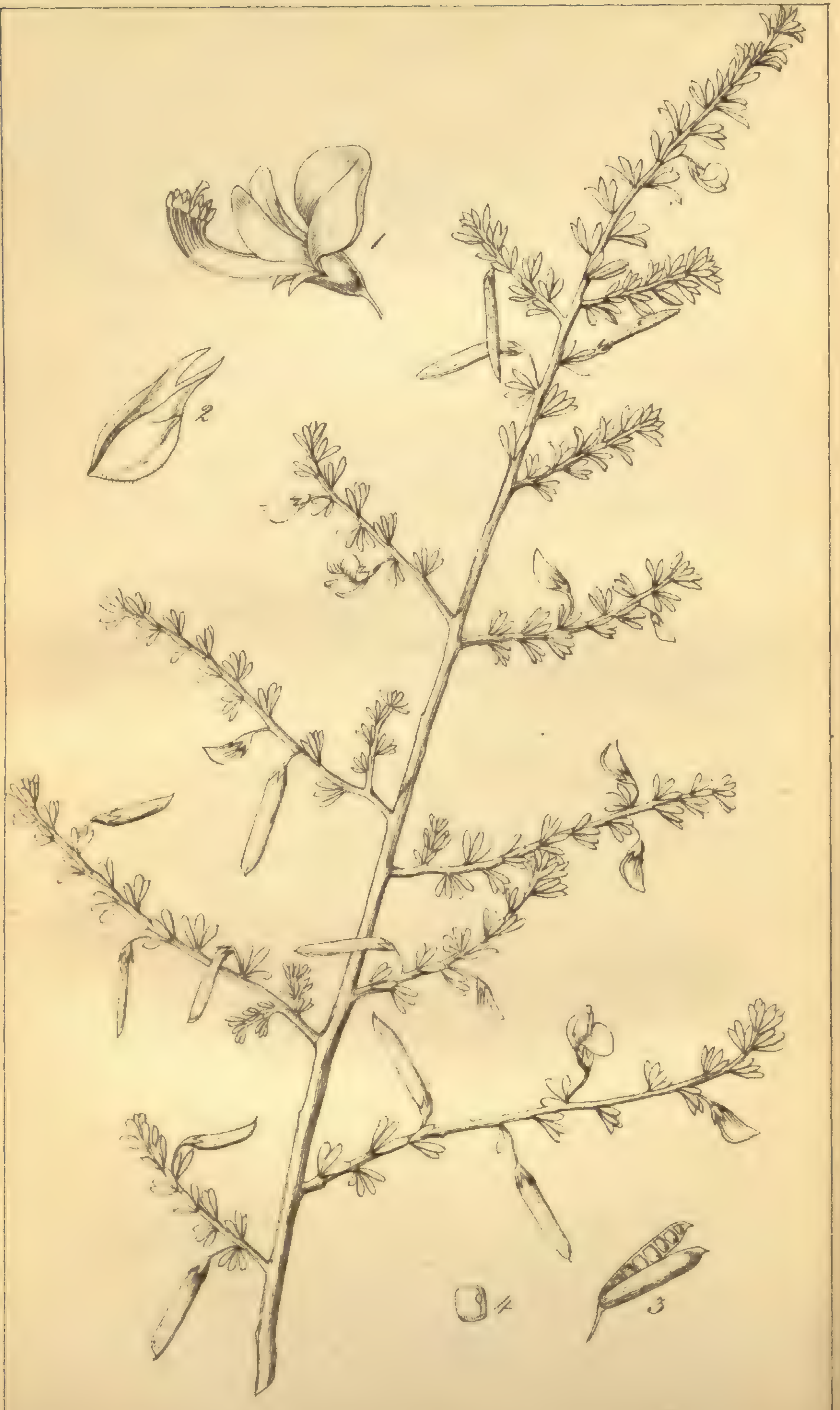
TRICHOMANES MONTANUM.

Fronibus oblongis basi attenuatis subsessilibus pinnatifidis, laciniis obliquis oblongis obtusis subsinuosis fructiferis terminalibus cuneatis, involucre exserto urceolato apice bialato, columna longe exserta.

HAB. On the trunk of a tree near La Sierra on the road to Esmeraldas, Colombia: elevation about 8,500 feet. *Prof. W. Jameson.*

I am not aware that this can be confounded with any known species of *Trichomanes*. The *caudex* is slender, creeping, and partially clothed with rusty down. *Fronds* erect, oblong and so tapering below as to be somewhat cuneate, nearly sessile, about 2 inches long, pinnatifid, nerved and finely reticulated: the fertile segments broader upwards, with a rather deep notch from which the *involucre* rises. This is wholly exserted, urceolate, with 2 lips at the extremity which are compressed, broader than the tube.

Fig. 1. Fertile segment:—*magnified.*



TAB. CLXXXVIII.

INDIGOFERA ASPALATHOIDES.

Fruticosa erecta, partibus junioribus canescentibus, ramis gracilibus numerosis undique patentibus, foliis sessilibus digitatim 3—5-foliolatis, foliolis anguste cuneatis parvis superne glabris subtus parce pilosis, pedunculis solitariis unifloris longitudine foliorum, floribus minutis, corolla cito decidua, leguminibus cylindricis acutis strictis subglabris 4—6-spermis. *W. et A.*

Indigofera aspalathoides. Vahl, in Herb. Juss. De Cand. Prodr. v. 2. p. 231. Wight, Cat. n. 845. Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 199.

I. aspalathifolia. Roxb. Fl. Ind. v. 3. p. 371. Wall. Cat. n. 4545.

Aspalathus Indicus. Linn. Sp. Pl. p. 1001. Burm. Ind. p. 155.

Lespedeza juncea. Wall. Cat. n. 5743. b.—Pluken. t. 101. f. 6. and 101. f. 2.—Rheed. Mal. 9. t. 37.

HAB. Madras Peninsula. *Dr. Wight.*

Flowers deep rose colour.

Fig. 1. Flower. *f. 2. Carina : magnified.—f. 3. Legume ; natural size.—f. 4. Seed : magnified.*



TAB. CLXXXIX.

RHYNCHOSIA RUFESCENS.

Diffusa vix scandens dense pubescens, foliolis rotundato-ovatis rugosis utrinque venis reticulatis prominentibus, racemis gracilibus plerumque elongatis pauci-(2—6)-floris, floribus solitariis distantibus subsecundis, segmentis calycinis longitudine fere leguminum elliptico-oblongis obtusis, legumine lenticuliformi acuto monospermo pubescente. *W. et A.*

Rhynchosia rufescens. *De Cand. Prodr. v. 2. p. 387. Wight, Cat. n. 767, 768, 769. Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 289.*

Glycine rufescens. *Willd. Nov. Act. Nat. Cur. Ber. 4. 1803. p. 222. Spreng. Syst. Veg. v. 3. p. 196.*

G. Pondicheriensis. *Spr. l. c.*

Cylista suaveolens. *Graham, in Wall. Cat. n. 5587.*

HAB. Soratoor, Gingie and the Cunnawady mountains. *Dr. Wight.*

Fig. 1. Flower (with the calyx removed). *f.* 2. Flower, with the petals removed : *magnified.*—*f.* 3. Seed-vessel laid open :—*natural size.*



TAB. CXC.

ANEMIA GARDNERI.

Fronde pinnata glabra, pinnis cordato-rotundatis crenulatis brevipetiolatis pulcherrime radiatim striatis, pedunculis binis ad basin frondis, spiculis paniculatis.

HAB. Brazil. *Mr. Gardner.* (n. 4).

Caudex repens (?) pilis longis sericeo-aureis densissime tectus.

Stipes digitalis, erectus. *Frons* longitudine stipitis, imparipinnata, glabra, pinnis subdecem, alternis, unciam longis, orbiculari-cordatis, brevipetiolatis, crenulatis, pulcherrime striatis, striis e basi radiantibus, supra subconvexis, viridibus, subtus paululum concavis, pallidis. *Pedunculi* bini e basi frondis ejusdemque longitudinis, superne paniculati. *Capsulæ* numerosæ, in spiculas congestæ.

A species quite distinct from any that I have ever seen or found described, and which I wish should bear the name of its discoverer, who is most zealously engaged in investigating the Botany of South America. The radiated striæ and the rounded form of the pinnæ in this species are highly remarkable.



TAB. CXCI.

ADIANTUM DOLABRIFORME.

Fronde elongata pinnata, pinnis petiolatis membranaceis subovatis margine superiore arcuatis lobulatis, inferiore basi que superiore truncatis, supremis oblique cuneatis, lobulis fructiferis.

HAB. Brazil. *Mr. Gardner.*

The species that comes nearest to the present one is the *Ad. lunulatum*, Sw., of the East Indies;—but there, as the name implies, the pinnæ are curved or somewhat half-moon shaped. Here the lower margin forms a straight line, as does the superior base, while the rest of the margin describes the segment of a circle. This configuration, the petiole being inserted at the lower angle and in a nearly straight line with the lower margin, gives to the pinnuli, including the petiole, somewhat the appearance of a hatchet.

Fig. 1. Pinna :—*magnified.*



TAB. CXCII.

CLADONIA PERFILATA.

Podetiis elongatis erectis ramosis, scyphis (?) numerosis orbicularibus, podetiis perfilatis nigro-fimbriatis demum reflexis.

HAB. Summit of the Pedra Bonita, at Tejuca, Brazil. Nov. 1836.

Mr. Gardner.

This is one of the most remarkable *Lichens* with which I am acquainted, and the same structure prevails in all the numerous specimens sent to me by Mr. Gardner. At first I was disposed to refer it to the *Cladonia perfoliata* of Martius, but a more careful comparison with the description and a reference to the figure of that species in Raddi's "Memoir on Brazilian plants," (t. 3. f. 4.) has convinced me that it is a totally different plant. The *scyphi*, if such they may be called, are almost exactly orbicular, developing as the podetium develops, at first small and convex, then larger and plane, beautifully margined with black fimbriæ, at length reflexed, frequently in a triangular manner as represented at f. 1. The colour is greenish-white, often tinged with brown.

Fig. 1. View of the underside of a scyphus (?) —*magnified.*



TAB. CXCIH.

LINDSÆA MACROPHYLLA.

Frondebis pinnatis, pinnis petiolatis oblongo-lanceolatis magis minusve acuminatis, soris in utramque marginem fere ad apicem continuis.

Lindsæa macrophylla. *Kaulf. Enum. Fil. p. 218.*

HAB. Guiana. *Kaulfuss.* Ilhios, Brazil. *Vauthier.*

Stipes pedalis, erectus, nitidus, nigerrimus, scaber. *Frons* circumscriptione late ovata, pinnata, pinnis 8—11, petiolatis, lanceolatis vel oblongo-lanceolatis, obtusis vel acuminatis, costatis atque oblique venosis, apice subserratis. *Sori* marginales, continui, fere ad apicem pinnarum attingentes.

This fine species of *Lindsæa*, part of the collection of M. Vauthier, I received from M. Moricand of Geneva.

Fig. 1. Portion of the fructified pinna :—*magnified.*

A.



B.



C.



TAB. CXCIV. A.

POLYTRICHUM SEMILAMELLATUM. *Hook. fil.*

Caulibus cæspitosis brevibus simpliciusculis, foliis lanceolatis concavis integerrimis subcoriaceis laxè imbricatis siccitate contortis, nervo superne latiore lamellato, lamellis undulatis, seta caulibus longiore, capsula inclinata subcylindræa, operculo longè rostrato.

HAB. Himala mountains. *Dr. Royle.*

Fig. 1. Plant, *natural size* ; *f.* 2. ditto, *magnified* ; *f.* 3. Leaf, and *f.* 4. Perichætical leaf:—*magnified*.

TAB. CXCIV. B.

GRIMMIA LAXIFOLIA. *Hook. fil.*

Caulibus elongatis cæspitosis, foliis mollibus lurido-virescentibus oblongo-lanceolatis carinatis integerrimis acutis siccitate crispis, seta elongata, capsula elliptico-oblonga lævi.

HAB. Himala mountains. *Dr. Royle.*

Fig. 1. Plant, *natural size* ; *f.* 2. ditto, *magnified*. *f.* 3 and 4. Leaves, and *f.* 5. Capsule laid open, showing the columella :—*magnified*.

TAB. CXCIV. C.

GLYPHOCARPA ROYLII. *Hook. fil.*

Foliis lanceolato-subulatis longissime acuminatis, nervo piliformi serrato excurrente, areolis oblongis, capsula globosa lævi.

HAB. Himala mountains. *Dr. Royle.*

Fig. 1. Plant, *natural size* ; *f.* 2. Ditto, *magnified*. *f.* 3. Leaves ; *f.* 4. A portion of ditto, showing the areolæ ; *f.* 5. Apex of ditto :—*magnified*. *J. D. H.*



TAB. CXCIV.

LISIANTHUS FRIGIDUS.

Caule fruticoso, ramis tetragonis angulis marginatis, foliis petiolatis ovatis breviter acuminatis, pedunculo terminali subtrifloro, corollæ tubo subcampanulato, limbi laciniis rotundatis obtusis patentibus, staminibus e tubo exsertis.

Lisianthus frigidus. Sw. *Fl. Ind. Occ. v. 1. p. 352.* Roem. et Sch. *Syst. Veget. v. 4. p. 195.*

HAB. La Souffrière, Dominica, *Pointheau.* La Souffrière, in the island of St. Vincent. *Rev. L. Guilding.*

The whole plant in drying assumes a yellowish tint. The leaves are 3—5 inches long, ovate or rather oval and acute at the base, shortly acuminate at the apex, coriaceo-membranaceous, opposite, penninerved. *Flowers 2 inches long, buff-yellow.*

Fig. 1, 2. Stamens. *f. 3.* Calyx and pistil :—*magnified.*



TAB. CXCVI.

LISIANTHUS DATUROIDES. Griseb.

Caule fruticoso tetragono crasso, foliis sessilibus ovatis acutis, pedunculo terminali subtrifloro, corollæ tubo campanulato calycem vix duplo superante, limbi laciniis rotundatis acutissimis patentibus, staminibus e tubo exsertis.

Lisianthus daturoides. Griseb. in Herb. nostr.

HAB. Jambrashamba, Andes of Peru. *Mathews, (n. 1317).*

This has the largest flowers of any species of *Lisianthus* with which I am acquainted, and will, with many other new species, be more fully described in a Memoir on the *Gentianæ*, now in the press, by Dr. Grisebach. This plant turns almost black in drying.



TAB. CXCVII.

ACROSTICHUM SQUAMIPES.

Caudice repente ramoso, frondibus ovatis obtusis supra viridibus subtus pallescentibus utrinque stipitibusque squamis sparsis ferrugineis tectis, fertili conformi minore.

HAB. Province of Chacapoyas, Peru (1836). *Mathews.*

Caudex longe repens, valde ramosus, crassitie *pennæ corvinæ*, dense squamosus, squamis rufo-fuscis. *Stipites* bipollicares, erecti, flexuosi, squamosi. *Fronde*s unciam longæ, ovatæ, obtusæ, coriaceæ, supra virides, subtus pallidæ, utrinque ferrugineo-squamosæ, squamis sparsis:—*fertiles* sterili minores, subtus ubique (præter marginem) capsulis numerosissimis atro-fuscis obtectæ.

This species has great affinity with *A. ovatum*, *Hook. and Grev. Ic. Fil.* 1. 146, from the Andes of Columbia; but that is a much smaller plant, more clothed with scales, and those scales are much finer and more delicate, giving a downy appearance to the whole surface.

Fig. 1. Sterile, and *f.* 2. fertile frond:—*slightly magnified.*



Menziesianæ.

N. O. Geraniaceæ.

TAB. CXCVIII.

GERANIUM CUNEATUM.

Fruticosum, foliis cuneatis coriaceis striatis apice truncatis dentatis, stipulis subulatis basi vaginantibus, pedunculis corymbosis.

HAB. Sandwich islands. *A. Menzies, Esq.*

I can meet with no description of this well marked *Geranium* in any work to which I have access, though it was found by the venerable Menzies so long ago as during the voyage of Captain Vancouver ; and though numerous Naturalists have since visited the Sandwich islands. Mr. Vancouver observes that it is the only species of this genus he detected there.



Douglasianæ.

N. O. Polemoniaceæ.

TAB. CXCIX.

FENZLIA DIANTHIFLORA.

GEN. CHAR. FENZLIA, *Benth.* *Cal.* tubuloso-campanulatus, profunde 5-fidus, sinubus membranaceis, laciniis linearibus acutiusculis erectis. *Cor.* infundibuliformis, tubo brevi, limbo 5-partito, laciniis obovatis dentatis. *Antheræ* ovatæ, sagittatæ, e tubo breviter exsertæ. *Capsulæ* loculi polyspermi. *Benth.*

Fenzlia dianthiflora. *Benth. in Bot. Reg. sub t. 1622.*

HAB. California. *D. Douglas.*

Herba pusilla, subsimplex, 2—3-pollicaris, glabra vel leviter pubescens. *Folia* opposita, linearia, integerrima. *Flores* 1-3, pedunculati. *Corolla* fere pollicaris, purpurascens, fundo luteo. *Benth.*

The present is the only known species of this graceful little Genus.



TAB. CC.

HUGELIA VIRGATA.

GEN. CHAR. HUGELIA. *Benth.* *Cal.* tubuloso-campanulatus semi-5-fidus, sinubus vix membranaceis, laciniis subinæqualibus, linearibus, rigidis, subspinosus. *Cor.* infundibuliformis, tubo breviter exserto, limbo 5-partito, laciniis oblongis integerrimis. *Stam.* ad faucem inserta. *Antheræ* lineares sagittatæ. *Capsulæ* loculi polyspermi.—Herbæ annuæ vel perennes, plus minusve albo-lanatæ. Folia alterna, linearia, integra v. pinnatifida. Flores dense corymboso-capitati, calycibus bracteisque imbricatis lana densa basi immersis.—A *Gilia* differt habitu et antheris. *Benth.*

Hugelia virgata; erecta stricta, foliis elongatis simplicibus v. pinnatifidis laxè albo-lanatis, corollæ tubo exserto, staminibus corolla brevioribus. *Benth.*

Hugelia virgata. *Benth. in Bot. Reg. sub t. 1622.*

HAB. California. *D. Douglas.*

Flowers bright blue.—This beautiful Genus, of which four species are described, all inhabiting California, is named *Hugelia* by Mr. Bentham, in compliment to *Baron Charles Hugel* of Vienna, a distinguished Naturalist and Traveller. *Hugelia* of Reichenbach is *Didiscus*, D. C.